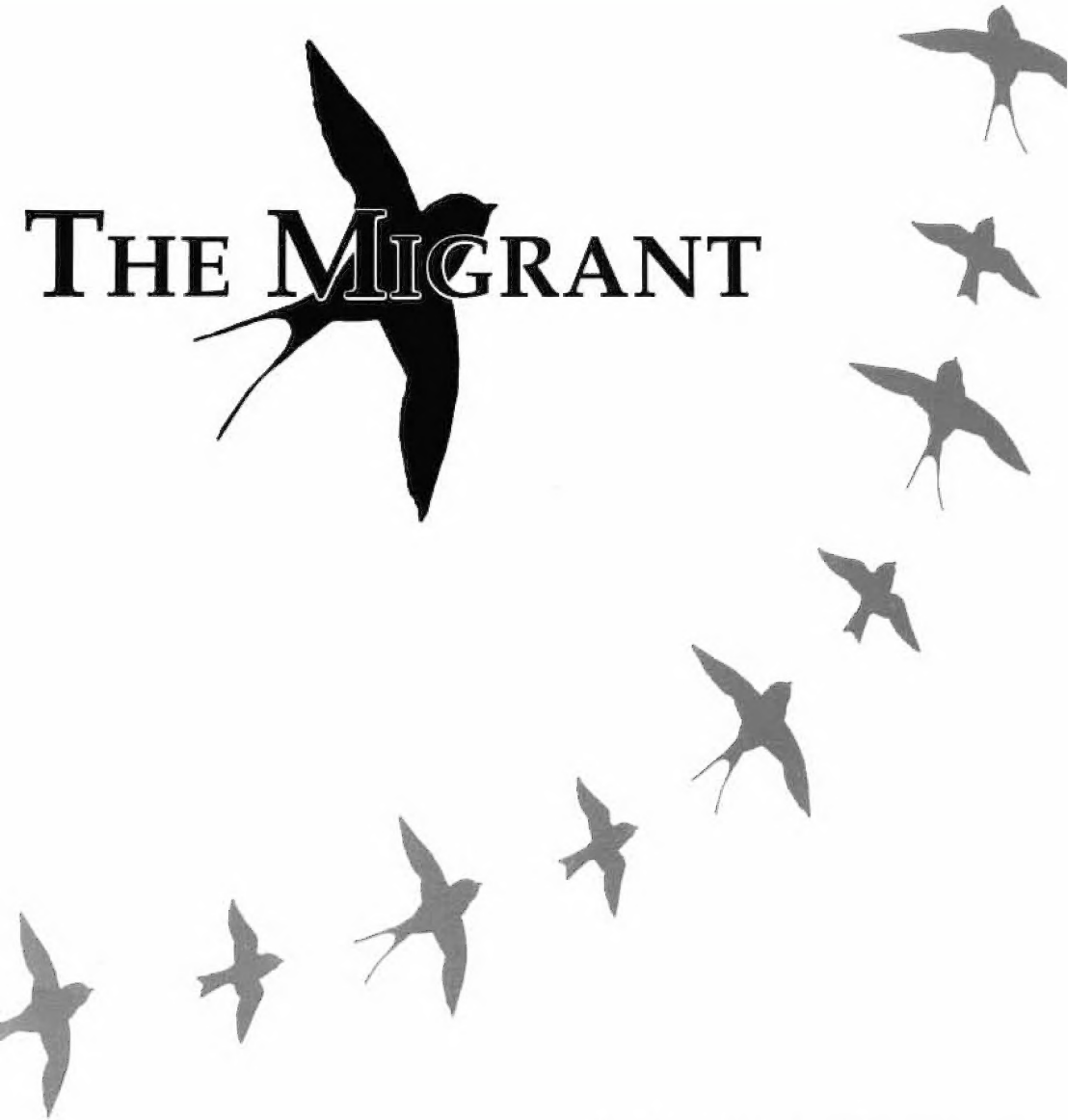

THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

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BREEDING BIOLOGY OF WHITE-BREASTED NUTHATCHES NESTING IN A BLUEBIRD BOX IN CENTRAL TENNESSEE

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This paper describes the breeding biology of a pair of White-breasted Nuthatches using a nest box in Nashville, Tennessee in 1995. Observations are presented on female display at the nest site, parental effort feeding nestlings, foods given to nestlings, weight and wing chord measurements of adult and nestling nuthatches, and nest structure. The nest under observation ultimately failed due to predation.

The White-breasted Nuthatch (*Sitta carolinensis*) is a fairly common permanent resident in Tennessee, but there has been little written about it in Tennessee in *The Migrant* except for sightings and numerical record counts. These birds usually nest in natural cavities, old woodpecker holes, or occasionally in nest boxes (Tyler 1948, Kilham 1972, Nicholson in press). In the spring of 1995 a pair bred in a bird box behind our home in the heavily wooded suburb of Forest Hills, Nashville, Davidson County, Tennessee. This is a maple-oak-hickory-hackberry area of lawns with large mature trees and broken woodlands merging with more extensive forest strips. It slopes down to Otter Creek, in the drainage of Radnor Lake.

Among many standard Bluebird houses with 3.8 cm holes placed around in lawns or facing grassy openings, one was at a height of 1.7 m on a young bur oak tree (*Quercus macrocarpa*) in a cluster of bur oaks and rotten snags in a small patch of woods along the creek. This box contained brown wood fiber from an old mouse nest. The nearest well-hidden homes were 60 to 185 m away.

On the morning of 11 March 1995 at 1100, as I checked the boxes, I halted 17 m away from the bur oak box at the sight of intriguing activity there. Clinging to the box, with head dipping into the hole, was a White-breasted Nuthatch, tail and wings well flared, swaying slowly and rhythmically back and forth at an angle of 45° each side of the hole. She peeked into the opening regularly as she swayed at a steady rate of 12 times per minute. (I later established the sexes of the birds; the female was not banded, the male was banded on the left tarsus.) She swayed and peeked for 30 minutes, interrupted twice for a few seconds by her watching mate when he fed her suet. Her bill was empty and she seemed in a trance-like state and jerked to awareness when fed. The male attempted to sway for a few seconds, but she shoved him away and continued her display. After 30 minutes she stopped abruptly and

entered the box repeatedly, bringing out bills full of the brown fiber and tucking it under bark flakes and around the back of the box. When I left at 1150, she was still doing this. Her mate did not enter. Possibly the wooded location, the rotten and holey snags, and fiber in the useable cavity attracted the nuthatch. Robbins et al. (1989) have shown that this resident of extensive forest has adapted to smaller woodlands and edge and may breed if numerous nut-bearing trees and suitable holes are present.

Earlier observers (Kilham 1968, 1972, Ritchison 1981, and summaries by Tyler 1948, and Stokes and Stokes 1983) have described White-breasted Nuthatch courtship displays, distraction and defense postures, and defense actions about the nest hole, particularly bill-sweeping of the surrounding tree bark. I have found no previous account of the female's prolonged trance-like swaying at the nest hole before building. I believe that this is a sexually significant display in pair-bonding, as well as an act of the female marking acceptance of the nest site and asserting dominance of the female at the nest.

For the next two weeks the nuthatches worked around and outside the box, but on 27 March, 16 days after the swaying display, the male carried food to the box. I looked in and saw the female sitting tightly in a soft, fluffy nest but did not disturb her or determine the clutch size. Kilham (1968) also notes the tight sitting. This apparent date of the onset of incubation agrees with Tennessee data (Nicholson in press).

Thereafter I watched the nest intermittently for 29 hours from 27 March to 29 April. To avoid leaving a scent trail that could be followed by raccoons (*Procyon lotor*) known to frequent the area, I limited visits to the box, approached it only during or before rain, stopped mowing paths, wore rubber boots, and watched from distances of 15 to 30 m behind bushes using 7x35 binoculars or a 24x60 Burris spotting scope.

Incubation was by the female only. The male fed her suet, seeds and insects up to 10 times per hour from dawn to sunset, when he flew to roost elsewhere. On 3 April, I picked the female off seven eggs, a normal clutch size (Lyle and Tyler 1934, Tyler 1948). I banded, measured, and marked both white cheeks with a red waterproof pen for easy identification. She had a large active brood patch. She squealed, fought hard, and escaped before I could weigh her, and, although her mate yanked in distress in the canopy, he did not swoop to attack as Eastern Bluebirds (*Sialia sialis*) do.

On bringing suet to the box and not finding his mate, he swept the tree bark and box lid constantly for 10 minutes with the suet in his bill. This defense sweeping of the nest area is well discussed by earlier workers cited; I observed it a number of times by both adults. The female returned to brood before dark and was fed again.

On 7 April both birds seemed excited; the male swept, the female swayed, and they both kept looking into the box. The eggs were pipping, because early on 8 April there were five naked, shrimp-pink, blind and shapeless nestlings and two eggs, one of which hatched later. Two nestlings had enough strength to lift quavering heads to show bright yellow gapes edged with black. This I call Day 1. Incubation was estimated as 12-13 days, a normal time (Tyler 1948).

The male fed six times an hour, and the female brooded from 90% of the time observed on Day 2 to 10% on Day 16. During the first 6 days the female came out

and begged for food, but the male paid little attention to her. Like a clockwork toy, he trotted down the tree and fed the young, entering the box to attend them. Perhaps she was inexperienced and this was her first nesting.

By Day 6 she was starting to feed the nestlings regularly, and by Day 7 the pair fed the young at a combined rate of seven times an hour. Activity began at sunrise and ceased at sunset. Feeding rates were lower in the mornings, about seven to nine times per hour. They increased during midday and early afternoon, averaging 19 times an hour and peaking on Day 17, 24 April, at 24 times. In late afternoon, during the three hours before sunset, the pace slowed to about 14 times per hour. The highest rates coincided with a spell of high daily temperatures. Possibly insect prey was more abundant in the warming season, and the energy costs to the birds in searching and flight were less. The pattern of feeding also shows increasing rates as the nestlings grew. For the third week, an estimate would be at least 200 feedings per day. Disturbance of the nest on Days 10 and 17 for banding, photographing and measurements caused marked slowing of the feeding for a time. The parents hesitated to approach the box and to enter the cavity.

The parents brought animal food — a large worm, a big fly, caterpillars, green inch worms (just starting to appear on hackberries), grubs, and many winged insects, but no suet. Food seemed plentiful and easily obtained. The male usually sang his rapid "wer-wer-wer" song while flying down the creek to search for prey. From the distance that the sound carried and the rapidity of the foraging, I estimated the feeding territory supplying nestling food to extend approximately 200 m down the creek and to be about 2 ha along the semi-wooded riparian corridor. In addition, the adults were supported by backyard sunflower and suet feeders farther away, leading to an estimated total feeding area of about 4.5 ha. Robbins et al. (1989) state that the minimum breeding area can be as low as 3 ha of forest for this species.

On rainy Day 10, 17 April, I captured the male inside the box; he was a bird previously banded 9 June 1994 as an adult of unknown age. I banded and photographed the six nestlings, still blind, now pink with pink throats and yellow gapes, well shaped but with weak legs and feet, tufts of gray down on feather tracts, and wing and tail feathers showing dark under the skin (Figure 1). They were quite clean, and the nest smelled and looked fresh and clean.

On rainy Day 17, I took the lively young out for measurements and photographs. They had open eyes and thin adult-like plumage flecked with white, thin poorly developed grayish yellow bills, and short wings and tails (Figure 2). Measurements of the young were for wing chord: n = 6, range 48-55 mm, mean 50.2 (3.1 mm (1 SD)) which equaled 58% of the adult wing length; measurements for weight: n = 6, range 18.0-21.6 g, mean 20.0 (1.3 g), equaling 100% of the adult weight.

Adult measurements of the White-breasted Nuthatch which allow these comparisons are from Tennessee birds measured at my backyard banding station, for wing chord: n = 19, range 83-90 mm, mean 85.9 (2.2 mm (1 SD)); for weight: n = 13, range 18.5-21.5 g, mean 20.0 (0.8 g). Measurements for known females (brood patch) are for wing chord: n = 3, range 83-84 mm, mean 83.7 (0.6 mm); for weight: n = 2, range 17.7-20.4 g, mean 19.1 (1.9 g).

Reaching adult weight in the late nestling period is not uncommon in cavity nesters which generally have longer time in the nest than open nesters (Nice 1957).

The weights usually level off to fledgling weight as water is lost and the flight feathers grow, but adult weight signifies that fledging is near (Welty 1975, Ricklefs 1968).

On Day 21 the parents were still feeding the nestlings at noon, but on Day 22 at noon on 29 April, the young were gone and there was evidence of raccoon predation: scratches and a few raccoon hairs on the tree bark and the box, one hair and a few feathers inside the box. At the foot of the tree lay one small wing part and several feathers. The nest surface was undisturbed and resembled a smooth firm felt mat. I could not find any of the nuthatches in the vicinity, but later in the day I heard nuthatch calls in the distance. It can only be stated that the nestling period was at least 21 days. Ritchison (1981) reported the full nestling period as 26 days in Wisconsin. Other accounts include 14 days (USFWS 1977), 19 days in Maryland (Kilham 1968), and at least 21 days (Patterson 1965).

My examination of the nest was instructive. In 158 feedings observed, I had seen the adults carry off only 20 fecal sacs, yet the nest always seemed fresh and clean. The female had filled the bottom of the box with 57 chunks of bark, some as large as 6x2 cm, with a total dry weight of 25 g, 1.2 times a female's weight. Mixed in were 54 g of forest material — moss, shreds of bark, old acorn shells, mud and dried leaves. The bark mix, thoroughly wet, seemed to have served as a drainage bed. On top of this, up to 11cm from the box lid, was a dry layer of soft fibrous material compacted on top to 3 cm thick, a light, strong crust or felted mat on which the young had grown. Parents commonly eat some of the early fecal sacs, and the nest material may have sanitized the fecal deposits as in a compost heap, while the solid uric acid compacted with the top fibers to form the hard crust. The nest was built up so high that the female was always able to look out, and a predator might hear the young begging.

On 11 June that spring, the marked and banded parents appeared again at my feeder and have come regularly to the sunflower seeds. I have not seen any of the young birds, which I would have been able to identify because I banded them on their right tarsus rather than on the left tarsus as I did for the adults.

ACKNOWLEDGMENTS

I appreciate my husband's support, the encouragement of Dr. Fred J. Alsop III, and the helpful comments of the editor and Chris Welsh.

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Figure 1. White-breasted Nuthatch nestlings on day 10 (17 April).

Figure 2. White-breasted Nuthatch nestlings on day 17 (24 April).

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Accepted May 25, 1997.

The Migrant, 68 (1): 7, 1997.

THE 1997 DISTINGUISHED SERVICE AWARD PRESENTED TO ANN T. TARBELL

J.D. JOSLIN
112 Newcrest Lane
Oak Ridge, TN 37830

AND

EDWIN S. GLEAVES
1004 Norfleet Dr.
Nashville, TN 37220

Ann T. Tarbell of Nashville, Tennessee, was the recipient of the 1997 Distinguished Service Award. The award was formally presented by Tennessee Ornithological Society (TOS) President James Brooks at the annual State Meeting in Chattanooga on 3 May, 1997. This award was established in 1989 to be given annually to persons who have made significant and lasting contributions to the TOS.

Dating from her early work with Katherine Goodpasture, Tarbell has been involved in numerous local and statewide programs: Breeding Bird Survey routes in Middle Tennessee, Raptor Surveys, the Breeding Bird Atlas Project, the MAPS program at Grassmere, and the Warner Parks.

In the 1960s, working with John Ellis and Lawrence Trabue, Tarbell frequently led walks to Cheekwood for the general public in Nashville and Davidson County. She has taken major responsibility for the last three TOS state meetings that were held in Nashville, including designating Nashville TOS (NTOS) members to lead field trips and obtaining speakers. Tarbell was also one of the prime movers in the successful campaign to save Radnor Lake from commercial development, working with other members to determine the appropriate avenues to approach the matter. She has spoken out on a number of such matters since, such as comments before the Nashville-Davidson County Greenways Commission. She has also served as compiler of the Audubon Christmas Counts for the Nashville area for 15 years, as well as other seasonal bird counts.

Tarbell edited *The Newshawk*, the NTOS newsletter, for over 20 years and has been producing the NTOS yearbook for over 10 years. She has written numerous articles for *The Migrant* and continues to do so (see this issue), and she has given papers at state meetings. She has been Secretary of NTOS and has served as a State Director several times over the last 30 years. She served as Vice-President of the TOS during 1991-93 and was NTOS Vice-President in charge of programs during 1972-74. She was also responsible for the Birdline for several years, which has since evolved into a statewide rare bird alert available over the Internet.

The Migrant, 68 (1): 8-9, 1997.

A SECOND WEATHER-INFLUENCED BIRD KILL IN UNICOI COUNTY, TENNESSEE

RICHARD L. KNIGHT
804 North Hills Drive
Johnson City, TN 37604

Three hundred forty-seven dead birds of 32 species were recovered on 5 October 1996 at two nearby sites in southwestern Unicoi County, Tennessee. The accidental bird kill occurred on the night of 3-4 October, according to reports by local residents. A cold front passed through East Tennessee that night, with light rain, fog, and a slight drop in temperature. These conditions contributed to a fallout of nocturnal migrants, mainly in the mountains. The primary site of the bird kill was a clearing at about 915 m (3000 ft) elevation, on Taylor Road in the Coffee Ridge community. A security light between two houses appeared to have attracted and disoriented the birds in the fog. A nearby second site was a church with a security light, about 2 km (1.5 miles) down the road, where 25 birds were recovered.

At the primary site, most of the carcasses picked up were centered around the light. Some had collided with the five small buildings (i.e., two houses, two barns, and a shed) or the light pole, while others were not near any of the structures. A few carcasses in the road had been crushed beyond recognition by vehicles. As the bird kill happened just over 24 hours prior to our visit, it was not surprising to find insects feeding on the bodies. A few scattered piles of feathers indicated the possible removal of other bodies by scavengers. A few injured birds and some that appeared unhurt still lingered at the site, most notably a Yellow-throated Warbler, a Lincoln's Sparrow, and at least two Sedge Wrens. These three species were not listed among the casualties below. With the exception of a single Mourning Dove, all victims were neotropical migrants.

Species and numbers of birds killed (both sites combined): Mourning Dove-1, Black-billed Cuckoo-3, Yellow-billed Cuckoo-5, Veery-2, Gray-cheeked Thrush-20, Swainson's Thrush-68, Wood Thrush-5, Gray Catbird-4, White-eyed Vireo-2, Yellow-throated Vireo-1, Red-eyed Vireo-3, Tennessee Warbler-21, Northern Parula-4, Chestnut-sided Warbler-5, Magnolia Warbler-4, Cape May Warbler-7, Black-throated Blue Warbler-39, Black-throated Green Warbler-3, Blackburnian Warbler-1, Palm Warbler-4, Bay-breasted Warbler-6, Black-and-white Warbler-1, American Redstart-18, Worm-eating Warbler-6, Ovenbird-48, Kentucky Warbler-1, Common Yellowthroat-4, Hooded Warbler-25, Scarlet Tanager-19, Rose-breasted Grosbeak-3, Indigo Bunting-2, Bobolink-1, thrush spp.-2, warbler spp.-9. Total: 347 birds of 32 species.

A previous accident at the primary Coffee Ridge site on 23-24 September 1992 killed 493 birds comprising 31 species (Knight 1993). Although the 1996 bird kill occurred 10 days later in the season than the 1992 incident, its species composition was very similar; Table 1 compares the five most numerous species from both accidents.

Considering the number of man-made hazards to nocturnal migrants and autumn weather patterns, accidents of the type described here must be rather frequent. Indeed, references to bird kills at towers, tall buildings, etc. abound in the literature. That two bird kills happened at this one small isolated site within four years further illustrates the point. How many similar incidents escape notice or are not reported? Over 800 birds of 38 species perished in the two bird kills at Coffee Ridge. The toll from all such accidents must be significant.

TABLE 1. TOP FIVE SPECIES FOUND
IN THE TWO UNICOI COUNTY BIRD KILLS
A = Number; B = Percentage of Total

23-24 Sept. 1992	A	B	3-4 Oct. 1996	A	B
Swainson's Thrush	151	31%	Swainson's Thrush	68	20%
Ovenbird	80	16%	Ovenbird	48	14%
Cape May Warbler	41	8%	Black-throated		
Black-throated			Blue Warbler	39	11%
Blue Warbler	36	7%	Hooded Warbler	25	7%
Tennessee Warbler	29	6%	Tennessee Warbler	21	6%
TOTAL	337	68%	TOTAL	201	58%

ACKNOWLEDGMENTS

Dev Joslin and Charles Nicholson provided helpful comments on an earlier draft. Victor Dyton and Fred Alsop participated in the recovery. Numerous specimens were placed in the biology collection at East Tennessee State University.

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The Migrant, 68 (1): 10, 1997.

THIRD VARIED THRUSH OBSERVED IN TENNESSEE

JANET H. AND ROBERT M. CUSHMAN
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From 13 to 17 April 1996 we observed a male Varied Thrush (*Ixoreus naevius*) in the backyard of our house, which is located in a subdivision in the Roane County section of Oak Ridge. The house is adjacent to a large tract of mixed deciduous forest (mostly oak, hickory, dogwood, black gum, and tulip poplar) on the U.S. Department of Energy's Oak Ridge Reservation. During that five-day period, we saw the thrush every morning (about 6:30-8:00 a.m.) and evening (about 5:30-7:30 p.m.). When we saw the bird, he was feeding on the ground under several large oaks, in a leaf litter mulch around a planting of evergreen azalea and cherry laurel next to grass. We had been regularly spreading mixed bird seed (red millet, white millet, and milo) on the ground in the area, and feeding sunflower and thistle seeds on pole-mounted feeders in the same planting. We do not know whether the bird was eating the seed, acorns, or other food. Other birds observed on the ground with the thrush included White-throated Sparrows (*Zonotrichia albicollis*), Dark-eyed Juncos (*Junco hyemalis*), and Mourning Doves (*Zenaida macroura*). Periodically, the thrush would retreat to a nearby row of Leyland cypress. At least once he flew, at treetop height, into the Reservation.

Our identification of the Varied Thrush (which was based on illustrations and descriptions in several of our bird books) was confirmed by local bird watchers Roger Kroodsma and Dev Joslin. The thrush was ultimately seen by approximately 45 bird watchers, including a group of 20 from the Tennessee Ornithological Society. J.B. Owen of the *Knoxville News-Sentinel* was with the group and described the bird in his column on 28 April, 1996. One mid-morning visitor reported hearing the bird singing. As far as we know, this is the third reported occurrence of the Varied Thrush in Tennessee; the first two (possibly of the same bird) were reported in Hamilton County between December 1990 and March 1991 and during February 1992 [*Migrant* 62(3):57-65 (1991); and *Migrant* 63(2):59-63 (1992)]. According to Edwards [*Migrant* 62(3):57-65 (1991)], winter sightings of Varied Thrushes have been reported across the eastern United States, although the bird's normal range is along the Pacific Coast of North America.

The Migrant, 68 (1): 11, 1997.

SECOND RECORD OF ALLEN'S HUMMINGBIRD IN TENNESSEE

Paul Pardue
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Knoxville, TN 37920

On the morning of 29 October, 1996, I observed a hummingbird, with a rufous tail, approach my feeders at 0700. The bird had abundant rufous on its rump and tail and a green back flecked with a few brown feathers. I again observed the bird on 3 November. After studying the bird over several visits, I decided that it was probably an immature male Allen's Hummingbird (*Selasphorus sasin*), based upon the combination of a largely green back and predominantly rufous rump and tail.

The bird was seen daily at the feeders at my residence in south Knoxville, on the southern shore of Fort Loudon Lake (Tennessee River) (Latitude 35° 52′ 28.89″ N; Longitude 83° 58′ 46.45″ W), and by a total of more than 80 birdwatchers. On 21 November, Bob and Martha Sargent arrived to attempt to capture, photograph, and band the bird. They set up their trap and, within 8 minutes, trapped the bird inside. Together they recorded data about the captured bird, with Bob measuring its dimensions, weighing and banding, and Martha photographing and recording the data. A few nonsignificant feather samples were also taken from areas that would not hamper its flight. The bird weighed 3.75 grams, and its two outer retrices (R #4 and #5) measured just over 2.2 mm and just under 2.0 mm.

Close observation of the bird allowed certain identification as an Allen's Hummingbird. The width of the outer retrices alone were diagnostic of an Allen's (Stiles 1972). In addition, based upon the extensive rufous color in the rump and tail, the bird clearly had to be either a male Rufous Hummingbird (*Selasphorus rufus*) or a male Allen's Hummingbird. The white tips on the outer tail feathers and the incomplete gorget indicated that it was an immature male, either a Rufous or an Allen's (Stiles 1972). The absence of rufous color on the back at this time of year was strong evidence that this was an immature male Allen's Hummingbird, rather than a Rufous. Most conclusive, however, was the fact that a large part of the back was molting into fresh, shiny new green feathers (Stiles 1972). These new green feathers sharply contrasted with old worn green feathers that were being replaced. If it were an immature male Rufous Hummingbird, those new feathers would have been rufous-colored. To my knowledge, this is the second record of Allen's Hummingbird in Tennessee, the first one having been banded in Chattanooga in 1993 (Bob and Martha Sargent, personal communication).

After recording data and photographing the bird, we held the bird up to the feeder bottle, from which it drank for quite a while. When we attempted to release the bird, he remained in my hand for some time before flying off. One of my feeders was equipped with a heater to prevent freezing of the solution, and he was observed daily at the feeder until 29 December. On that warm day (18° C), he was seen several times at the feeder and appeared healthy. He was not seen subsequently.

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The Migrant, 68 (1): 12-14, 1997.

MINUTES OF FALL 1996 TOS BOARD OF DIRECTORS MEETING

The Fall meeting of the Tennessee Ornithological Society (TOS) was held on 12 October, 1996, at Crow's Neck Environmental Center. The Mississippi Ornithological Society made the arrangements for the joint MOS-TOS weekend meeting. Field trips were taken on mornings of 11 Oct. and 12 Oct. in the area of the Center near Tishomingo, Mississippi, led by MOS members.

President James Brooks called the business meeting to order at 1700. Audrey Hoff, seconded by Phine Britton, moved that the minutes of the Spring 1996 meeting be approved as written. The motion was unanimously passed.

COMMITTEE REPORTS: There were no VICE PRESIDENTIAL or DIRECTORS-AT-LARGE REPORTS.

TREASURER'S REPORT: The report was approved as presented by David Trently. Highlights included:

— INCOME was $4,362.37, including: $2,731.00 from dues and subscriptions, $1,566.37 from interest, $15.00 from library subscriptions, and $50.00 miscellaneous.

— EXPENSES totaled $1,033.43, including: $247.00 for the *Tennessee Warbler* and $783.23 miscellaneous.

There was no CURATOR'S REPORT.

MIGRANT EDITOR: Brooks reported for Wallace Coffey regarding the three recent issues of *The Migrant*. The 1994 issue is ready to go to press, and the 1995 and 1996 issues are forthcoming in that order. There is room for more material in the 1996 issue, but it will be completed by the end of 1997. Martha Waldron reported that the NOMINATING COMMITTEE has recommended the nomination of Dev Joslin as the new editor of *The Migrant*. The nomination passed unanimously.

ATLAS COMMITTEE: Brooks reported that Chuck Nicholson is projecting a publication date close to December, 1997.

There were no reports from the BIRD RECORDS or CONSERVATION COMMITTEES.

COLLATERALS COMMITTEE: Brooks reported for Bill Bridgforth that TOS patches have been produced and are ready for purchase by the chapters. The recommended price is $2.50 each for three different colors (for regular, new and life members), or $2.00 each for 10 or more. Carolyn Bullock expressed her willingness to take care of the distribution and details of the project. A motion to accept the price structure and to appoint Bullock as coordinator passed unanimously. Bridgforth was commended for his completion of the project. A motion to utilize the patch design on a decal and to proceed with production passed unanimously. Discussion was held on the color to use for the decal. A motion to use the bold outline passed unanimously. A consensus was reached not to consider lapel pins at this time.

WARBLER EDITOR: Susan McWhirter reported for Theresa Irion that the next deadline for *The Tennessee Warbler* is October 31, 1996. McWhirter will prepare the report of the Spring meeting for the next issue of the *Warbler*.

OLD BUSINESS: Bob Ford reported that there is continuing discussion between officials in Tennessee and the Dominican Republic regarding PARTNERS IN

FLIGHT, a partnership to work toward preservation of migratory bird habitats there. The TOS was thanked for the compilation of past point counts, which are being put together in book form. A copy of the results are available to those who are interested.

NEW BUSINESS: Bob Hatcher reported for the TWRA that Janet Troup is working with Partners in Flight (PIF). He reported that Fred Baumgarten, of the National Audubon Society's Important Bird Areas project, has communicated with Troup about establishing PIF point count areas in Tennessee. A motion for the President of TOS to appoint a committee to endorse the IBA project and to begin the site nomination process passed unanimously. Brooks called for volunteers for the committee.

Brooks reported that the TOS web site has moved (with Alice Kirby) to the University of Virginia.

Marcia Davis reviewed the purpose of the PROJECT FUNDING COMMITTEE: To establish a permanent fund to support projects related to Tennessee birding in the areas of education, scientific research, and conservation. Projects must serve the cause of ornithology in Tennessee to be considered for funding, and the statewide TOS Board of Directors must vote to approve specific projects presented for consideration. The Committee requested that the Board of Directors provide some direction on three issues:

1. The formation of a segregated fund, set up by the Finance Committee, to keep track of money designated for the Project Funding Committee.

2. The authorization of members of the Committee, with the approval of the Finance Committee, to pursue looking into getting grants or partnerships with other organization to come up with fundraising ideas.

3. The placement into the Project Fund of money from contributions and memorials not designated for specific purposes.

After discussion, the issues were voted on separately and all passed unanimously.

Bob Hatcher read a letter from the Nashville TOS Chapter that presented to the Project Funding Committee a check for $250 from the Katherine Anderson Goodpasture Memorial Fund to be used as the Committee decides.

Audrey Hoff presented a project to be considered by the Project Funding Committee. The statewide project is to support the building of Osprey platforms in cooperation with TVA in Tennessee lakes. The first platforms have been built near Knoxville, and future platforms will be built by local chapters, using the expertise developed by the Knoxville chapter. A motion to approve the project passed unanimously.

Marcia Davis presented a project to be considered by TOS chapters in the next year. Cornell School of Ornithology has developed a research-based interdisciplinary curriculum, "Project Feeder Watch for Educators," for middle schools. The project is being tested at pilot schools at present, and by Fall of 1998 it will be available to all educators. Funds from the WATCHABLE WILDLIFE program could be used to promote the curriculum, and local chapters could promote the curriculum in their area schools. Davis read a letter from Ken Dubke, which summarized his suggestions for funding guidelines for the Project Funding Committee. It was suggested that the proceeds from the Dean Witter Liquid Assets Fund be deposited into the Committee's account. A consensus of the Directors was to instruct the Fi-

nance Committee to consider the suggestion, as well as reconstruct the origins of the fund which was built with funds from both a donation from Gordon H. Briley in 1973 and unused *Migrant* funds.

Brooks announced that the Spring TOS Meeting will be in Chattanooga on May 2-4, 1997. Details will be forthcoming in the *Warbler*.

The John Sellars TOS Chapter will host the Mid-Winter meeting at Paris Landing Feb. 1-2, 1997. Details will be forthcoming.

A motion was made and passed that the TOS adopt a policy to reimburse standard office expenses incurred by TOS members in their committee work.

Respectfully submitted,
HARRIETTE L. SPIEGEL, TOS Secretary

The Migrant, 68 (1): 15-23, 1997.

THE 1996 CHRISTMAS BIRD COUNT

by Frank D. Hixon

Twenty individual counts were conducted in Tennessee for the 1996-1997 Christmas Bird Count season with a total of 143 species seen. Almost 300 observers took part in counts across Tennessee. Species of note included Great Egret, Common Merganser, Dunlin, Golden Eagle, Peregrine Falcon, large numbers of Black Vultures, Allen's Hummingbird, Sedge Wren, Marsh Wren, American Tree Sparrow, LeConte's Sparrow, and Lincoln's Sparrow. A new count was started in Shady Valley.

In the table, CW indicates species seen during the count week (three days before or after the day of the actual count).

INFORMATION ON THE COUNTS

MEMPHIS: No date stated; 0600-1630; cloudy; wind SW 15-35 mph; temp. 48-62°F; 25 observers in 5-9 parties; 110 party hours (73 on foot, 37 by car); 136 party miles (46 on foot, 90 by car); plus 2 hours and 3 miles owling; 91 species; 28,242 individuals. David Blaylock, Carolyn H. Bullock, Price Bullock, Lula C. Coffey, Bob Cooper, James A. Ferguson, Sue Ferguson, Robert P. Ford, Adam Griffin, Ron Griffin, Van Harris, Martha Heinemann, Ginger L. Ilardi, Robert L. Ilardi, Margaret Jefferson, Keith Kunkel, Jo Levy, N. P. McWhirter, Susan N. McWhirter, George R. Payne, Jeanne B. Payne, William R. Peeples, Dick D. Preston, Ernest Restivo, Martha Waldron (compiler - 1626 Yorkshire Drive, Memphis, TN 38119).

REELFOOT LAKE: 21 Dec.; 0500-1730; clear to partly cloudy; wind S 15-20 mph; temp 18-39°F; still water partly frozen, moving water open; 13 observers in 6 parties; 53.5 party hours (35.5 on foot, 18 by car), plus 1 owling; 337.5 party miles (12.5 on foot, 325 by car), plus 5 owling; 109 species; 199,614 individuals. Dunlin was a new species for this count. Jerry Drewry, Bob Foehring, Bob Ford, Mark Greene (compiler - 81 Trenton Hwy, Humboldt, TN 38343), Paul Hertzel, Rebecca Irwin, Ken Keggett, Nancy Moore, David Nailling, Joe Stone, Sabin Thompson, Jeff Wilson.

JACKSON: 28 Dec.; 0630-1700; partly cloudy to clear; wind SW 15-20 mph; temp 55-68°F; open water; 4 observers in 3 parties; 26 party hours (20 on foot and 6 by car), plus 1 owling; 255.5 party miles (9 on foot and 246.5 by car), plus 3 owling; 80 species; 53,711 individuals. Greater White-fronted Goose, Snow Goose, and Lincoln's Sparrow were all new for the count, but none were unexpected. Bob Ford, Mark Greene (compiler - 81 Trenton Hwy, Humboldt, TN 38343), Bill Reinke, Joyce Reinke.

SAVANNAH: 30 Dec.; 0500-1730; cloudy, heavy a.m. fog with light drizzle; wind, variable, 0-5; temp 55-68°F; 10 observers in 4-5 parties plus one feeder watcher; 47.25 party hours (29.25 on foot and 18 by car), plus 1.5 owling and 4 at feeders; 301.3 party miles (25 on foot and 267.3 by car), plus 14.6 owling; 95 species, 8,977 individuals. Full details provided on unusual species. Michael Beuerlein, Ralph Brinkhurst, Phillip Casteel, Jef Garner, Lois Johnson, Francis Markine, Gary Markine, Elizabeth Sherrod, Floyd Sherrod, Damien Simbeck (compiler - 4905 County Rd. 33, Killen, Al 35645), Chris Sloan.

BUFFALO RIVER: 27 Dec.; 0630-1700; cloudy, foggy, light rain; temp 44-61°F; open water; 13 observers in 6 parties; 61 party hours (26 on foot and 35 by car), plus 2.5 owling and 2 hours at feeders; 334 party miles (23.5 on foot and 310.5 by car), plus 20.5 owling; 77 species; 9953 individuals. Michael Beuerlein, Connie Hollman, Chester McConnell, Dorothy McConnell, Royce Neidert, Jane Newell, Betty Perry, Donette Sellers, Harlie Sides, Matthew Sides, Don Simbeck (compiler - 424 Riddle Lane, Loretto, TN 38469), Fred Wiley, Morris Williams.

COLUMBIA: 28 Dec.; 0600-1630; cloudy; wind SW 8 mph; temp 50-70°F; open water; 10 observers in 4 parties; 29 party hours (11 on foot and 18 by car), plus 3.5 owling; 284 party miles (11 on foot and 273 by car), plus 19 owling; 80 species; 4,449 individuals. Steven Brinkley, Bob Brown, Janet Brown, Nancy Byer, William Jernigan, Allyn Lay, Bedford Lochridge, Cleo Mayfield, Mark Mayfield, George Mayfield (compiler - 999 Sunnyside Dr., Columbia, TN 38401).

NASHVILLE : 21 Dec.; 0630-1700; partly cloudy to clear; wind SE variable, gusty to 24 mph; temp 17-42°F; 32 observers in 9 parties, plus 8 feeder watchers; 1 hour and 3 miles owling, other times and miles not stated; 70 species; 10,246 individuals. Pine Warbler was third CBC record in 30 years; largest ever number of Black Vultures. Sandy Bivens, Jean Buchanan, Ed Byrnes, Hazel Cassel, Phillip Casteel, Richard Connors, Beth Creighton, Frank Fekel, Ed Gleaves, Bob Hatcher, Susan Hollyday, Louise Jackson, Ed Landers, Heather Leverette, Scott Lovell, Joe McLaughlin, Susan Marden, Scott McCarley, Diana McLusky, Karl Meyer, Daniel Moss, John Noel, Elizabeth O'Conner, Polly Rooker, Jan Shaw, Ann Tarbell (compiler - 6033 Sherwood Drive, Nashville, TN 37215), Jim Thoman, Bob Van Kirk, Rita Venable, Melinda Welton, Mary Zimmerman. Feeder watchers, Jeanne Cobb, Cherrie Hall, Lynn Hedgecoth, Laura Knox, Jane Maynard, George Koehler, Marge Koehler, Marge Patrick, Oscar Patrick, Helen Wright.

HICKORY-PRIEST: 1 Jan.; 0445-1715; cloudy; wind calm; temp 50-60°F; 10 observers in 5 parties plus 2 feeder watchers; 52.75 party hours (20.75 by foot and 32 by car), plus 33 owling; 314.25 party miles (11.75 by foot and 302.5 by car), plus 34.75 owling; 91 species; 14,927 individuals. Full details on Common Merganser. Linda Anderson, Hazel Cassel, Phillip Casteel, Annella Creech, Jerry Drewry, Joe Francis, Susan Hollyday, Sally Robertson, Jeanece Seals, Chris Sloan (compiler - 6312 Kingsbury Drive, Brentwood, TN 37027), Joe Stone, Sabin Thompson, Betty Worden.

MURFREESBORO: 4 Jan.; time not stated; partly cloudy; wind 20 mph+; temp high 65°F; 9 observers in 5 parties; 28 party hours; 194 party miles (2 by foot, 192 by car); 62 species; 5,545 individuals. Richard Hunter, Wilma Hunter (compiler - 3659 Wilson-Overall Road, Murfreesboro, TN 37130), Dan Jackson, Mary Ann Jackson, David McCarroll, Fran Shepard, Ton Shepard, Ferrell Wilson, Terry Witt.

NICKAJACK LAKE: 4 Jan.; time not stated; overcast; wind and temp not stated; 17 observers; 69.5 party hours (40.5 by foot and 29 by car), plus 10 owling; 369 party miles (18 on foot and 351 by car), plus 71.5 owling; 93 species; 14,879 individuals. Full details provided on Great Egret. Mary Lynn Buttram, David Chaffin, Carla Christinsen, Jerry Drewry, Danny Gaddy, Bill Haley, John Henderson, Dan Jacobson, Kathy Jacobsen, Starr Klein, Johnny Parks (compiler - 164 McDonald Drive, Ringgold, GA 30736), Tommie Rogers, Robin Rudd, Chris Sloan, Joe Stone, Sabin Thompson, David Vogt.

COOKEVILLE: 20 Dec.; 0411-1650; snow flurries then clearing; wind W variable 0-10 mph; temp 10-24°F; small ponds frozen, running water partly frozen; 13 observers in 6 parties plus 4 feeder watchers; 46.25 party hours, plus 10hours by feeder watchers and 2.5 hours owling; 434.5 party miles, plus 25 owling; 70 species; 39,109 counted individuals, plus estimated 1.5 million blackbird species in roost. Highest totals in 34 years of CBC: Pied-billed Grebe, Canada Goose, Mallard, Gadwall, Black Vulture, Red-shouldered Hawk, Red-bellied Woodpecker, Yellow-bellied Sapsucker, and White-throated Sparrow. Terry Campbell, Daniel Combs, Ginger Ensor, Graham Kash, Ken Morgan, Michael O'Rourke, Helen Redding, Thomas Roberts, Thomas Says, JoAnne Schaefer, Richard Simmers, Barbara Stedman, Stephen Stedman (compiler - TTU Box 5053, Cookeville, TN 38505). Feeder watchers, Mozelle Medley, Handley Oswalt, Phillip Redding, Shayne Schaefer.

CHATTANOOGA: 28 Dec.; 0730-1730; cloudy, foggy, with light rain; wind SSW 0-3 mph; temp 50-58°F; 26 observers in 11 parties; 87.75 party hours (47.5 on foot, 40 by car, .25 by boat), plus 1 hour at feeders and 4.25 hours owling; 509.75 party miles (30 on foot, 479.5 by car and .25 by boat), plus 71.5 owling; 97 species; 18,628 individuals. Mary Lynn Buttram, Kevin Calhoon, Ken Dubke, Lil Dubke, Doug Green, Bill Haley, Gary Hartman, Doug Hayes, Geraldine Hayes, John Henderson (compiler - 7323 Fairington Circle, Hixson, TN 37343), Dan Jacobson, Starr Klein, Jonnie Sue Lyons, Barbara McMahan, Mike McMahan, Peter Robinson, Robin Rudd, Roi Shannon, Sandy Smith, David Vogt, Blake Wilkerson, Cynthia Wilkerson, Jim Wilkerson, Dan Williams, Meg Wooley.

HIWASSEE: 1 Jan.; 0600-1800; foggy in a.m., then clear; wind calm; temp 54-62°F; 19 observers; 61 party hours (40 on foot, 17.5 by car and 3.5 by boat); 302.5 party miles (20.5 on foot, 266 by car, and 16 by boat); 92 species; 16,086 individuals. Clyde Blum, Mary Lynn Buttram, Kevin Calhoon (compiler - 1185 Mountain Creek Road, Apt 715, Chattanooga, TN 37405), Andrew Core, Ken Dubke, Lil Dubke, Bill Haley, John Henderson, Laura Mitchell, Johnnie Parks, Robin Rudd, Boyd Sharp, Allan Trently, David Trently, John Upchurch, Chris Welsh, Libby Wolfe.

KNOXVILLE: 22 Dec.; 0615-1715; cloudy, light rain; temp 23-42°F; 33 observers in 16 parties plus 2 at feeders; 112.75 party hours (68.75 on foot and 44 by car), plus 1.5 owling; 472.4 party miles (36 on foot and 436.4 by car), plus 4.1 owling; 81 species; 17,017 individuals. Allen's Hummingbird coming to feeder most of December, had been previously banded and identified. Jane Beintema, Frank Bills, Sharon Bostick, Ed Clebsch, Meridith Clebsch, Marcia Davis, Maurice Grigsby, Jerry Hadder, Paul Hartigan, Audrey Hoff (compiler), Ron Hoff, Tom Howe, David Howell, Susan Hoyle, Kristine Johnson, Dev Joslin, Joel Keebler, Tony Koella, Stephen Krauss, Barbara Mandruss, Dollyann Myers, Chuck Nicholson, Holly Overton, Paul Pardue, Karen Petrey, Tom Parucker, Kelly Roy, Martha Rudolph, Michael Ryon, Susan Schott, Debra Searfass, Boyd Sharp (coordinator), David Trently, Chris Welsh, Corwin Witt.

GREAT SMOKY MOUNTAINS NP: 29 Dec.; 55 species; Keith Langdon, compiler. Information from *Knoxville News-Sentinel*, February 2, 1997.

NORRIS: 21 Dec.; 70 species; Chuck Nicholson, compiler. Information from *Knoxville News-Sentinel*, February 2, 1997.

GREENEVILLE: 28 Dec.; 0600-1800; mostly cloudy; wind calm to light and variable; temp 40-60°F; open water; 18 observers in 9 parties, plus 1 feeder watcher; 36.25 party hours (7.75 on foot, 25.5 by car, 3 by boat), plus .5 owling and 9.5 hours at feeder; 221.9 party miles (7.5 on foot, 211.4 by car, and 3 by boat); 68 species; 12,280 individuals. Ben Britton, Phine Britton, Glenna Eackert, King Gaut, Margaret Gaut, Will Gaut, Don Holt, Jim Holt (compiler, 311 Colonial Circle, Greeneville, TN 37745), Alice Loftin, Don Miller, Richard Nevius, Willie Ruth Nevius, Helen Reed, Helen Spees, Royal Spees, JoAnne Routledge, Larry Routledge, Virginia Williams.

ELIZABETHTON: 21 Dec.; 0615-1700; clear; wind calm; temp 2-35°F; ponds frozen, 1-3 inches snowcover, with some mountain roads impassable; 14 observers in 5 parties; 44 party hours (24 on foot, 20 by car), plus 1.5 hours owling; 303 party miles (12 on foot, 291 by car), plus 2 miles owling; 69 species; 4,215 individuals. Full details provided on Greater Scaup and Lincoln's Sparrow. Fred Alsop, Wallace Coffey, Greg Harris, Danny Huffine, Teresa Hutson-Feliu, Andy Jones, Rick Knight (compiler - 804 N. Hills Drive, Johnson City, TN 37604), Jeff Larsen, Tom McNeil, David Sams, Bryan Stevens, Gary Wallace, Frank Ward.

BRISTOL: 28 Dec.; no time or weather details; 20 observers in 6 parties; 59 party hours (31 by foot and 28 by car), plus 5 hours owling; 448 party miles (17 by foot and 431 by car) plus 40 owling; 77 species; 18,871 individuals. About average count for the past decade. Eared Grebe and Palm Warbler were new species for the count. New highs recorded for Pied-billed Grebe, Carolina Chickadee, Tufted Titmouse, and Northern Cardinal. Bob Biller, Ron Carrico, Wallace Coffey, Joanne Detta, Jane Fleenor, Pat Galigher, Ken Hale, Ron Harrington, Anna Hess, Andy Jones, Lloyd Jones, Rick Knight, Tom Laughlin, Richard Lewis (compiler - 407 V.I. Ranch Road, Bristol, TN 37620), Larry McDaniel, Judy Musick, Rick Phillips, Peter Range, Van Remsen, Randy Smith.

ROAN MOUNTAIN: 22 Dec.; 0615-1645; cloudy; wind SW 5-12 mph; temp 17-41°F; ponds and Ripshin Lake frozen, some ice on creeks, 1-3 inches snowcover; 5 observers in 2 parties; 17 party hours (10 on foot, 7 by car), plus 1 hour owling; 76 party miles (7 on foot and 69 by car), plus 1 mile owling; 40 species; 830 individuals. Fred Alsop, Linda Jones, Rick Knight (compiler - 804 N. Hills Dr., Johnson City, TN 37604), Tom Laughlin, Jennifer Laughlin.

SHADY VALLEY: 29 Dec.; 0715-1730; overcast; temp 45-62°F; 11 observers; 28 party hours; 240.2 party miles (4.5 on foot, 237.7 by car) 47 species and 2,709 individuals. This is a new count area designed to completely cover the Shady Valley area in Johnson County, Tennessee. The count circle is centered on Iron Mountain, on Hwy 421, between Mountain City and Shady Valley. The circle includes Shady Valley, plus portions of Holston Mountain extending nearly to the Bristol CBC area, and Doe Valley as far north as Laurel Bloomery. There is no overlap with other CBC count areas and the entire circle is in Tennessee. Rob Biller, Ron Carico, Wallace Coffey, Andy Jones, Rick Knight, Dan Lady, Jennifer Laughlin, Tom Laughlin (compiler - Rt. 1, Box 982, Roan Mountain, TN 37687), Larry McDaniels, Rick Phillips, John Shumate.

1996 CHRISTMAS BIRD COUNT

	Memp	Reel	Jack	Sav	Buff	Colu	Nash	Hk-Prst	Murf	Nick	Cooke	Chat	Hiwas	Knox	GSMNP	Norris	Greene	Eliz	Bris	ShdyV	Roan
Common Loon		1			1			71		4		8	1					5	2		
Pied-billed Grebe	39	139	6	18	5	16	1	67	3	142	7	40	19	55		3	1	8	110		
Horned Grebe		4		16				121		4		10		2				8	7		
Eared Grebe																			6		
American White Pelican																					
Double-crested Cormorant	10	8			CW			14		66		1		12							
Great Blue Heron	58	44	8	47	16	21	7	63	9	51	8	82	143	127	3	11	14	10	16	6	
Great Egret	2									1				1							
Black-crowned Night-Heron		1						18						4	1						
Mute Swan	1																				
Greater White-fronted Goose		40	14																		
Snow Goose		2	10	8		2		6			1									1	
Canada Goose	440	2106	16	1	290	398	180	490	400	99	410	506	513	406		142	219	109	500	1	
Wood Duck	90	36		5	3	2		2	5	28		29	3	2	2		4				
Green-winged Teal	2	2	6	2		22		1				30	116			2	8				
American Black Duck	6	10675				16	14	2				6	258	5		1	18	1	6		
Mallard	702	145312	28	31	12	72	126	643	35		70	1020	814	290	55	127	77	248	798	61	15
Northern Pintail	4	2	2	3				1	6			10	10	4					3		
Blue-winged Teal	22					12						1									
Northern Shoveler	245	6	36		1	30	2	10				12	1								
Gadwall	73	4437	6	11		385	62	8		268	18	56	150	60			53	4	13		
American Wigeon		81	2	3		35	8	3	5			23	42			3	4		58		
Canvasback	4	15				13	16			18											
Redhead		54				3								2				3			
Ring-necked Duck	167	193	1	3		85	48		2	10		18	6	16			CW	14	54		
Greater Scaup		2								77		4						1			
Lesser Scaup	1580	2937		2	11	2	313	21		66		4	1	1			CW				
Oldsquaw		CW																			
Common Goldeneye		13		10				8		28	1	19		1							
Bufflehead		154					89	18		45	6	86	21	3		9		96	130		

	Memp	Reel	Jack	Sav	Buff	Colu	Nash	Hk-Prst	Murf	Nick	Cooke	Chat	Hiwas	Knox	GSMNP	Norris	Greene	Eliz	Bris	ShdyV	Roan
Hooded Merganser	23	622	10		2	21		1	5		32	13	202	80					134	2	
Common Merganser		2						1					1								
Red-breasted Merganser		2				1		1		1						2					
Ruddy Duck	14	730			9	15				75											
Black Vulture		32	9			22	267	1	15	44	23		107			8	32	4	51		
Turkey Vulture	2	1	30		6		24	1	2	207	14	17	92	2	2	3	44	4	71		
Bald Eagle		90		2					CW	6		3	14	1				1	3		
Northern Harrier	29	17	2	16	5	5	1	1	2	1	1	2	6				1				
Sharp-shinned Hawk	3	2		1			3	6	1	3	2	3	9	4		2	2	2	4		
Cooper's Hawk	3	2		2	CW		1	2	4	2	3	8	7	9	1	2	4	3	5	2	1
Accipiter species		1			1		3	1			1								1		
Red-shouldered Hawk	4	6	4	9	3	1	2	2		18	10	9	17	6		2			1	2	
Red-tailed Hawk	84	56	30	13	38	28	57	21	30	18	36	25	26	33	3	20	14	13	36	3	3
Harlan's Red-tailed Hawk						1															
Rough-legged Hawk			31			1															
Golden Eagle		CW																			
American Kestrel	41	42	31	4	23	39	34	27	55	10	47	16	18	20	4	15	24	12	23	3	1
Merlin		1		1				1													
Peregrine Falcon								1													
Ruffed Grouse																		3	1		1
Wild Turkey	89	CW		1	6	12							1				14		5		
Northern Bobwhite	36	CW	12	7	12	11		27	5	1	15	1	15								
Virginia Rail																					
Sora				1																	
American Coot	116	1795	6	18	12	168	15	684	10	4550		83	10	318		8	11	6	120		
Sandhill Crane												24	4946								
Killdeer	241	75	126	811	18	27	92	120	31	133	60	182	584	77		100	11	26	20	4	
Least Sandpiper	150	5		2									3								
Dunlin		1											13								
Common Snipe	3	10	8	16	12	31		36		5		36	59	4	14	2	1	18	4		

	Memp	Reel	Jack	Sav	Buff	Colu	Nash	Hk-Prst	Murf	Nick	Cooke	Chat	Hiwas	Knox	GSMNP	Norris	Greene	Eliz	Bris	ShdyV	Roan
American Woodcock		2		3				6		7		2	2								
Bonaparte's Gull	22	108		4				343		82		4	11	23							
Ring-billed Gull	422	7529		190		1	19	5555	3000	1952		2721	628	1477		599		8	205		
Herring Gull		19		5				25	2	31		15	2	5							
Forster's Tern		1																			
Rock Dove	1190	51	208	94	52	121	144	430	1	149	154	1438	13	1085	79	142	215	282	371	20	122
Mourning Dove	203	233	547	124	546	47	202	182	110	111	120	675	370	606	67	47	233	227	727	291	11
Eurasian Collared Dove												2									
Barn Owl									2								2				
Eastern Screech Owl		1		1	6	6		2	1	13	10	7	5	3		6	1	6	10	1	4
Great Horned Owl	2	1	1	4		4	1	2	2	14	5	1	8	2		1	5	2	19		
Barred Owl	3	4	4	9	1	2	3	1		1	2	3			1	2					1
Short-eared Owl		CW		1																	
Allen's Hummingbird														1							
Belted Kingfisher	14	8	4	13	15	7	11	17	9	17	3	24	34	42	3	9	15	9	16	11	
Red-headed Woodpecker	27	8	5	7	11	3				8	28	2	1		1	1					
Red-bellied Woodpecker	127	49	24	47	84	24	62	12	15	47	63	67	59	85	7	41	33	19	32	3	1
Yellow-bellied Sapsucker	27	5	1	15	10	6	17	11	1	18	6	14	19	15	4	12	5	5	4	2	
Downy Woodpecker	42	34	24	37	73	24	73	35	18	47	38	52	30	45	20	37	30	18	31	7	7
Hairy Woodpecker	10	4	6	8	8	3	14	5	3	11	6	5		11	3	4	6	3	2	1	1
Northern Flicker	110	40	30	46	59	10	31	31	12	37	28	56		53	4	24	29	22	22	3	
Pileated Woodpecker	8	7	3	10	33	7	4	11	2	26	16	7		12	9	13	19	20	37	5	3
Eastern Phoebe		1		6	3	1				8	4	5	15	2	1	6	4	4	4	1	
Horned Lark	137	1215	38	134	49	8				4							20				
Blue Jay	190	71	226	265	357	31	145	53	40	137	300	278	190	510	27	106	136	124	279	44	81
American Crow	105	154	30000	152	324	87	814	198	300	629	580	463	344	813	124	318	244	468	1118	1399	91
Fish Crow		CW	5																		
Common Raven															5			1	2	1	6
Carolina Chickadee	147	95	35	168	102	49	177	108	40	144	104	222	132	292	72	161	113	103	180	95	36
Tufted Titmouse	68	43	36	86	185	49	154	97	40	96	108	103	92	149	34	131	48	94	146	30	14

	Memp	Reel	Jack	Sav	Buff	Colu	Nash	Hk-Prst	Murf	Nick	Cooke	Chat	Hiwas	Knox	GSMNP	Norris	Greene	Eliz	Bris	ShdyV	Roan
Red-breasted Nuthatch												1	2			2					7
White-breasted Nuthatch	1	16	3	19	43	5	32			21	24	16	10	14	11	44	14	19	36	4	5
Brown-headed Nuthatch				4						1		8	16								
Brown Creeper	11	4	4	5	3	1	1	14	3	5	5	3	2	2	5	5	1	5	3		1
Carolina Wren	138	30	27	59	94	31	66	51	5	78	34	131	89	90	20	46	43	31	77	16	12
House Wren	1		2		1			2		2		3	3								
Winter Wren	3	5	6	2	7	2	1	3	1	16	1	4	11	8	4	10	2	CW	9	1	
Sedge Wren				2				2													
Marsh Wren		1		7								2									
Golden-crowned Kinglet	11	12	2	6	11		6	21	2	38	20	13	37	21	13	44	6	16	63	7	10
Ruby-crowned Kinglet	21	13	8	30	13	3	6	19		50	5	29	50	12	3	16	CW	3	7		
Eastern Bluebird	28	39	77	194	258	69	117	71	70	185	98	192	414	240	46	193	185	53	113	52	4
Hermit Thrush	5	4	7	5	10	3	5	3		16	2	4	31	6		12		8	15		
American Robin	341	40	33	72	36	25	404	91	50	255	13	233	481	612	9	65	56	36	2	30	6
Northern Mockingbird	98	20	38	26	60	35	92	69	20	44	49	82	77	168	6	45	47	33	127	16	4
Brown Thrasher	20	1	9	12	20		1	3		16	10	17	9	7	2	9	2		1		
American Pipit	1	2	2	10	30					5			108								
Cedar Waxwing	33		3	61	49	13	35	17		209	10	351	89	584	34	120	155	44	61		
Loggerhead Shrike	7	8	6		15	7	5	2	3	2	1		5	2			5	1	1		
European Starling	6786	6295	9201	1573	3924	1400	3965	3559	1	2021	5200	3926	1213	5416	67	435	7964	1115	11441	216	57
Orange-crowned Warbler												1									
Yellow-rumped Warbler	158	86	13	319	60	20	76	56	15	383	92	172	414	293	4	225	98	33	37		
Pine Warbler	1		2	3	2			1		25		6	30		2	1					
Palm Warbler	1			1			1			1		1	3	2	1	3	2		2		
Common Yellowthroat		1																			
Northern Cardinal	345	291	209	296	404	113	414	160	50	133	213	335	247	443	48	165	86	125	241	28	41
Eastern Towhee	35	3	19	31	65	22	80	22	11	48	44	88	57	93	6	44	14	8	32	4	2
American Tree Sparrow			7																		
Chipping Sparrow			1	8							25		36	130							
Field Sparrow	122	20	226	167	364	112	81	114	25	183	77	300	215	314	21	51	23	7	26	10	2

	Memp	Reel	Jack	Sav	Buff	Colu	Nash	Hk-Prst	Murf	Nick	Cooke	Chat	Hiwas	Knox	GSMNP	Norris	Greene	Eliz	Bris	ShdyV	Roan
Vesper Sparrow	2	2		2																	
Savannah Sparrow	92	184	6	150	50	11		2		19	1	16	29	3		3		34	3		
LeConte's Sparrow	1			1																	
Fox Sparrow	43	27	10	11	11	1	2	2		7	5	8	12	4		1					
Song Sparrow	393	220	171	421	173	67	83	100	6	145	166	390	510	381	89	209	45	88	163	55	80
Lincoln's Sparrow		3	1	2														1			
Swamp Sparrow	57	222	175	271	42	29	14	69	3	49	16	132	157	29	7	2		3	6	4	1
White-throated Sparrow	1015	421	230	241	601	74	438	146	30	347	228	453	476	704	110	277	151	180	214	9	47
White-crowned Sparrow	24	10	20	3	60	23	13	16	3	6	4		5	13		16	11	8	57	23	
Dark-eyed Junco	174	35	92	186	180	39	100	63	48	93	148	63	128	46	21	66	9	123	68	15	102
Lapland Longspur		7																			
Red-winged Blackbird	1773	7609	8100	1200	109	140	287	262	100	283	6	824	314	194	1		33			1	
Eastern Meadowlark	151	162	133	288	174	47	14	53	20	29	42	38	139	35	11	93	52	23	51	1	
Western Meadowlark		21																			
Rusty Blackbird	304	32		3	176			35		93		259	20						1		
Brewer's Blackbird		4	2	154	60																
Common Grackle	6245	610	2800	364	5	36	330	20	600	231	30000	1468	41	4		3	1356		200		1
Blackbird species											1.5 mil										
Brown-headed Cowbird	2381	3362	330	86	2	8	150	4	100	25	14	53	25				3				
Purple Finch	50				28					3	1	2		14		3	16		6		3
House Finch	105	80	55	41	3	38	278	137	60	57	115	84	94	208	20	18	72	47	225	106	6
Red Crossbill															6						
Pine Siskin															13		1	1			4
American Goldfinch	34	27	33	139	144	62	92	39	95	121	61	274	170	232	55	145	70	112	139	87	8
Evening Grosbeak																	44	44			28
House Sparrow	334	219	17	13	262	25	22	75	1	39	65	57	40	47	3				55	25	
Total Species	91	109	80	95	77	80	70	91	62	93	70	97	92	81	55	70	68	69	77	47	40
Total Individuals	28482	199614	53711	8973	9953	4449	10246	14927	5545	14879	39109	18628	16086	17017	1184	4493	12280	4215	18871	2709	830

The Migrant, 68 (1): 24-32, 1997.

THE SEASON

RICHARD L. KNIGHT, Editor

FALL: 1 AUGUST - 30 NOVEMBER 1996

Fall is a time to get out and observe, study, and marvel at the spectacle of bird migration. Based on the reports received, many of you did just that, and a good season it was. In addition to the expected migrants, numerous rarities were encountered.

A massive fallout of Common Loons was noted in the northeast. Eared Grebes, Oldsquaws, and Rufous Hummingbirds appeared in opposite ends of the state. A Brown Pelican, Roseate Spoonbill, and Ross' Goose graced the western region, while a Northern Goshawk and Henslow's Sparrow surprised birders in the east. Among waterfowl, Tundra Swans were found in each of the regions reporting. The hawk flight appeared modest, but interesting nonetheless. Shorebirds were a definite highlight, even though some habitat was inundated by heavy September rains or high maintained lake levels. Warblers and other passerines passed through in good variety, but variable numbers.

I thank Richard and Amanda Lewis for computer assistance in the editing of this report.

WESTERN COASTAL PLAIN REGION: West Tennessee received its share of rain during the fall season as Memphis and Shelby County surpassed its old record of 23.23 inches of autumn rain set in 1906 with a new record of 23.87 inches. Despite wet, muddy fields and poor visibility, 42 observers who deserve praise for their determination spent 82 days covering seven counties in west Tennessee. A Brown Pelican, a Roseate Spoonbill, and a Black-headed Grosbeak were the main attractions. The Brown Pelican was the fourth state record while the Black-headed Grosbeak was the fourth record for West Tennessee. A new early state record was set for an Eared Grebe and new late state record was established for a Mississippi Kite. Twenty-six Buff-breasted Sandpipers set a new high count for the state.

Grebe-Stork: **EARED GREBE**: 19 - 21 Aug (1) Shelby Farms (*MLG, VBR), early state. **Horned Grebe**: 20/30 Nov (2) Samburg, Obion Co. (WGC); 24 Nov (75) Britton Ford, Henry Co. (MAG). **American White Pelican**: 17 Aug/13 Oct (40) Phillipy (WGC, WRP, TAR, VBR); 12 Oct (375) Heloise, Dyer Co., 30/31 Oct (276) two locations, Dyer Co.; 30 Oct/5 Nov (350) Mississippi River, Lake Co. (WGC); 30 Oct (1) Chickasaw NWR, Lauderdale Co. (3) Eagle Lake WMA (BJC, Polly Rooker); 12 Oct/8 Nov (1) Everett Lake, Dyer Co. & (24) Is. 21 (WGC). **BROWN PELICAN**: 27 Aug/1 Sep (1 im) Reelfoot L SP (WGC, *MAG, Kathy Krone, Nancy Moore), fourth state record. **American Bittern**: 28 Nov (1) Black Bayou WMA (WGC). **Anhinga**: 17 Aug (1 m) Gr River Rd & Hwy 104, Dyer Co. (WRP); 28 Aug/20 Sep/8 Nov (1)

Shelby Co. (LCC, HBD). **Great Egret**: 18 Aug (1200) Phillipy (WRP), second state high. **Tri-colored Heron**: 6 Sep (1) Whites Lake WMA (*MAG). **White Ibis**: 4 August (1 im) Mud Lake, Shelby Co. & 19 Aug (10) Pres. Is. (MAG); 18/30 Aug (1 m/3 im) Whites Lake WMA (WGC). **Glossy Ibis**: 5/6 Sep (1 ad) Whites Lake WMA (WGC, *MAG). **ROSEATE SPOONBILL**: 14/15 Aug (1 im) Phillipy (*Doris Tichenor, KOS, TOS); 25 Aug (1 im) Black Bayou WMA (*WGC). **Wood Stork**: 18/25 Aug (21/200+) Pres. Is. (*Buddy Beaver, Robert Brown, CWM); 23 Aug - 5 Sep (60 max) Eagle Lake WMA (CHB, Kate Gooch, CWM, WRP, Linda Zempel).

Swan-Moorhen: An aerial survey of West Tennessee WMA's identified 23,584 ducks, 4,931 coots, 80 Canada Geese and 1 swan on 30 October. On 26 November the number of ducks increased to 162,925, 340 coots, and 972 geese were reported (BJC, Polly Rooker). **Tundra Swan**: 28 Nov (1 ad) Lauderdale WMA, Lauderdale Co. (WGC). **Ross' Goose**: 19 - 23 Nov (3 max) Phillipy/Black Bayou WMA (*WGC, MAG). **Greater Scaup**: 28 Nov (1) Reelfoot NWR, Obion Co. (WGC). **Oldsquaw**: 20-28 Nov (4) Reelfoot NWR, Obion Co. (WGC, US Fish & Wildlife). **Osprey**: 16/17 Aug (4) Lake Co. (TOS); 1/2 Sep (1) Tiptonville Bar, Lake Co. (MAG); 1/22 Sep (1) TEC (CHB, MGW); 3 Oct (1) Whites Lake WMA (WGC); 9 Oct (1) Shelby Forest SP (CHB, SCF, Van Harris, DDP, VBR, BHW); 12 Oct (1) Is. 21 (WGC). **Mississippi Kite**: 19 Aug/25-30 Aug (adult feeding two chicks) two locations, Memphis; 15 Sep (nest with two "branchling" young) Memphis (OKM); 23 Oct (1) Millington, Shelby Co. (JAF), late state. **Bald Eagle**: 20 Nov (1 im, banded) Hwy 70 between Jackson and Lexington, Madison Co. (OKM). **Sharp-shinned Hawk**: 11 reports from Dyer (1), Fayette (1), Haywood (1), Lake (1), and Shelby (7) Cos. **Cooper's Hawk**: 14 reports from Dyer (1), Fayette (3), Lake (1) and Shelby (9) Cos.; 2 of the Fayette Co. birds had been shot and were taken to Memphis Zoo Rehabilitation Center (OKM). **Broad-winged Hawk**: 25 Sep (6) Wolf WMA (CHB, HBD, VBR, BHW). **"Harlan's" Red-tailed Hawk**: 9 Nov (1) Shelby Farms (CHB). **Merlin**: 30 Aug (1 f) Hwy 78 near Wynnburg, Lake Co. (MAG); 11/16 Sep (1) TEC (CHB, VBR); 12 Oct (2) Memphis (LCC, MaH); 18 Oct (2) Martyr's Park, Shelby Co. (LCC, MaH). **Peregrine Falcon**: 19 Sep (1) Eagle Lake WMA (AJT); 30 Sep (1) Shelby Farms (Blake Soule); 30 Oct- EOP (1) Memphis (MaH); 10 Nov (1 im) TEC (CHB, MGW). **King Rail**: 8/17 Aug (1 ad, 1 im) Black Bayou WMA (WGC, KOS, TOS). **Virginia Rail**: 13 Sep (1) Univ. of Memphis campus (Bob Cooper). **Sora**: 29 Aug (1) Eagle Lake WMA (AJT); 13 Sep (1) Shelby Farms (VBR); 17 - 20 Sep (1) Memphis (fide CHB). **Common Moorhen**: 1 Sep (10) Walnut Log, Obion Co. (MAG).

Shorebirds: The EARTH Complex continues to attract large numbers of shorebirds. The observers (CHB, MAG, MLG, VBR, MTOS, AJT, MGW) continued their bi-weekly observations. For information on species and numbers not reported in this report please contact the seasonal compiler. **Black-necked Stilt**: 3 Aug - 16 Sep (75) TEC; 4/9 Aug (9 max) Hwy 103 and Gr River Rd, 8 - 29 Aug (9 max) Whites Lake WMA, (16) Black Bayou WMA & 26/27 Aug (4) Phillipy (WGC); 29 Sep (2) Pres. Is. (MLG, VBR, MGW). **American Avocet**: 8 Aug/6 Sep (1) Whites Lake WMA (WGC, MAG); 10 Aug - 21 Sep (1) TEC (AJT, VBR); 27/28 Aug (4) Jct Hwy 103 & Gr River Rd, Dyer Co. (WGC); 5 Sep (1) Phillipy (WGC); 29 Sep (2) Pres. Is. (MLG, VBR, MGW); 3/10 Nov (3) TEC (CHB, JEW, MGW). **Lesser Yellowlegs**: 1 Aug - 20 Oct (175 max) TEC; 1 Nov (1) Wolf WMA (SNM, MGW). **Upland Sandpiper**: 17/18 Aug (10/1) Hwy 79W (WGC, m.ob.), 18/28 Aug (1) Whites Lake WMA, (1) Hwy 79W (WGC). **Willet**: 10 Aug/23 Sep (2) TEC; 22 - 28 Aug (1) Whites Lake WMA &

21 Aug (1) Shelby Farms (MTOS); 26/27 Aug (1) Is. 13 (WGC); 11 Sep (1) Eagle Lake WMA (CHB, VBR). **Ruddy Turnstone**: 8 Aug/30 Aug (1) Black Bayou WMA (WGC); 17 Aug (2) Moss Island WMA, Dyer Co. (WRP); 31 Oct (1) Is. 13 (WGC). **Sanderling**: 12 - 23 Aug (2 max) TEC; 26 Aug/1 Sep (3) Is. 13 (WGC, MAG). **Western Sandpiper**: 12 Aug - 20 Oct (20 max) TEC; 16/30 Aug (4) Phillipy (MAG); 21/24 Aug (3) Shelby Farms (WRP, VBR); 17 - 28 Aug (7 max) Whites Lake WMA (WGC, MAG); 4 Sep (1) Eagle Lake WMA (AJT). **Least Sandpiper**: 1 Aug - EOP (5,000+ max) TEC. **Baird's Sandpiper**: 4 Aug - 11 Sep (3) TEC; 16/20 Aug (12 max) Phillipy (MAG); 17 Aug (2) Lake Co. (TOS); 13 Sep (1) Shelby Farms (VBR); 27 Aug (1) Hwy 79W & Gr River Rd (WGC). **Pectoral Sandpiper**: 3 Aug (1300 max) TEC; 16/30 Aug (150+) Phillipy (MAG); 23 Nov (2) Black Bayou WMA (WGC). **Dunlin**: 12 Aug/20 Sep - 11 Nov (1) TEC; 27/28 Oct - 3 Nov (15 max) Shelby Farms (MTOS, MLG, Robert Peoples); 31 Oct (1) Black Bayou WMA & 31 Oct/5 Nov (8 max) Is. 13 (WGC). **Stilt Sandpiper**: 3 Aug - 6 Oct (111 max) TEC; 26 Aug (27) Phillipy (WGC). **Buff-breasted Sandpiper**: 17/18 Aug (10/1) Hwy 79W, Dyer Co. & 22 Aug/1 Sep (6) Black Bayou WMA (WGC); 24 Aug (1) Shelby Farms (WRP); 17 Aug/1 Sep (7 max) Whites Lake WMA, 26 Aug (10) Is. 13 & 27/30 Aug (1) Phillipy (WGC, MAG); 1/22 Sep (26 max) TEC (MLG), new high count for state; 5 Sep (6) Whites Lake WMA (WGC); 17 Sep (1) Shelby Farms (VBR). **Long-billed Dowitcher**: 10 Aug (6) TEC; 16 Aug (1) Phillipy (MAG); 17 Aug (1) Whites Lake WMA (MAG); 24 Sep (1) Shelby Farms (MLG). **Short-billed Dowitcher**: 11 Aug - 2 Sep (1) TEC; 30 Aug (1) Phillipy (MAG); 1 Sep (1) Shelby Farms (MLG). ***Dowitcher spp.***: 17 Aug (3) Moss Island WMA, Dyer Co. (WRP); 28 Aug (5) Whites Lake WMA (WGC); 4 Sep (1) Shelby Farms (CHB). **Wilson's Phalarope**: 17 - 22 Aug (1) Black Bayou WMA (TOS); 18/31 Aug (3) TEC; 26 Aug (1) Phillipy & 28 Aug/1 Sep (2) Whites Lake WMA (WGC). **Franklin's Gull**: 18 Nov (1 ad, 1 im) Black Bayou WMA (WGC). **Bonaparte's Gull**: 10 Nov (2) TEC (CHB, MGW); 28 Nov (2) Memphis (LCC, MaH). **Caspian Tern**: 27 Aug (2) Tiptonville, Lake Co. (WGC); 30 Aug (1) Reelfoot LSP, Lake Co. & 31 Aug (1) TEC (MAG); 17/24 Sep (2) Shelby Farms (MLG, VBR); 3 Oct (2) Is. 21 (WGC). **Forster's Tern**: 1 Sep (3) Tiptonville Bar, Lake Co. (MAG); 23 Sep (1) Shelby Farms (MLG); 13 Oct (1) Champy's Pocket, Reelfoot LSP, Lake Co. (WGC). **Black Tern**: 8 Aug (6) Black Bayou WMA & 18 Aug (1) Hwy 103 and Gr River Rd (WGC); 22 Aug (1) TEC (MLG, VBR, MGW). **Common Nighthawk**: 3 -16 Sep (112 - 10) Memphis (MaH, OKM); 7 Oct (4) Memphis (OKM); 14 Oct (12) Memphis (BHW). **Short-eared Owl**: 12 Nov (1) Memphis (OKM); 28 Nov (1) Black Bayou WMA (WGC). **Rufous Hummingbird**: 21/26 Oct (1 ad m) Gibson Wells, Gibson Co. (Gay Little, *MAG). *Selasphorous sp.*: 7 Nov - EOP (1 im) Gibson Wells, Gibson Co.(Gay Little, *MAG).

Flycatcher-Grosbeak: **Yellow-bellied Flycatcher**: 17 Sep (1) Shelby Farms (VBR); 30 Sep (1) Shelby Forest SP (DDP), identified by call. **Willow Flycatcher**: 31 Aug (1) TEC (MAG), responded to tape. **Least Flycatcher**: 22 Sep (1) Shelby Farms (VBR), identified by call. **Tree Swallow**: 13 Oct (900) Lauderdale Co. (JAF, SCF). Fish Crow: 16 Aug (1) Phillipy (MAG); 29/30 Sep (1/2) Shelby Forest SP (WRP/DDP); 13 Oct (4) Golddust, Lauderdale Co. (JAF, SCF). **House Wren**: 19-25 Sep (1) Eagle Lake WMA (AJT, WRP); 3 Nov (2) TEC (JEW, MGW); 30 Nov (1) Whites Lake WMA (WGC). **Sedge Wren**: 3 Oct (2) Shelby Farms (VBR, TAR); 13 Oct (1) Wolf WMA (CHB, SNM, VBR, MGW). **Marsh Wren**: 3 Nov (1) TEC (JEW, MGW). **Solitary Vireo**: 3 Nov (1) Shelby Farms (CHB). **Philadelphia Vireo**: 20/22 Sep (2 max) Shelby Farms (CHB, VBR, MTOS); 22 Sep (1) Shelby Forest SP (WRP). **Yellow Warbler**: 14 Aug (2)

Wolf WMA (CHB, SNM, BHW, MGW). **Mourning Warbler**: 1 Sep (1) Tennemo Levee, Dyer Co. (MAG); 15 Sep (1) Shelby Forest SP (AJT); 25 Sep (1) Memphis (LCC, MaH); 30 Sep (1) Shelby Forest SP (DDP); 27 Oct (1) Eagle Lake WMA (DDP, Alan Griffin, Ron Griffin, FFM, SGR). **BLACK-HEADED GROSBEAK**: 10 Oct (1 m) Tipton Co. (DDP), fourth west TN, first Tipton Co. **Chipping Sparrow**: 2/3 Nov (62 max) Shelby Farms (CHB). **Lark Sparrow**: 19 Aug (1 ad) Pres. Is. (MAG). **LeConte's Sparrow**: 27 Oct (4) Eagle Lake WMA (DDP, Ron Griffin, Alan Griffin, FFM, SGR). **Lincoln's Sparrow**: 22/29 Sep (1) Shelby Farms (CHB, Sara McBride), early w TN and Shelby Co.; Sep (1) TEC; 14/27 Oct (1) Eagle Lake WMA (DDP, Alan Griffin, Ron Griffin, FFM, SGR); Nov (1) Eagle Lake WMA (SNM, MGW); 2/3 Nov (1) Shelby Farms (CHB); 10 Nov (1) TEC (CHB, (WGW). **White-throated Sparrow**: 5 Oct (1) Jackson, Madison Co. (AAH, HSH), ers. **Bobolink**: 17 Aug (3) Lake Co. (TOS). **Evening Grosbeak**: 29 Nov (1 m) Hwy 70, near TN River, Benton Co. (MAG).

Locations: Black Bayou WMA-Black Bayou Waterfowl Management Area, Lake Co.; Eagle Lake WMA-Eagle Lake Waterfowl Management Area, Shelby Co.; Gr River Rd-Great River Road, Dyer Co.; Is. 13-in Lake Co.; Is. 21-in Dyer Co.; Memphis-in Shelby Co.; Phillipy-in Lake Co.; Pres. Is.-President's Island, Shelby Co.; Shelby Farms-in Shelby Co.; Shelby Forest SP-in Shelby Co.; TEC-The Earth Center, Shelby Co.; White Lake WMA-in Dyer Co.; Wolf Lake WMA-in Fayette Co.

MARTHA G. WALDRON, 1626 Yorkshire Dr., Memphis, TN 38119

HIGHLAND RIM AND BASIN REGION: No report was available this season.

EASTERN RIDGE AND VALLEY REGION: Seasonal temperatures prevailed during this reporting period and precipitation was slightly above normal, being heaviest in September.

All in all, this was a pretty good birding season. A major fallout of loons occured in mid November. Three reports of White Ibis in northeast Tennessee were notable. A single hawkwatch station recorded respectable numbers, although the Broad-wing Hawk tally was down from the previous year.

Shorebird habitat was generally scarce. The water level in most reservoirs remained high late into the season and rainfall kept most ponds full. However, those sites with available habitat attracted a nice variety of migrant shorebirds.

An Eurasian Collared-Dove persisted in Chattanooga. Two Rufous Hummingbirds and a rare Henslow's Sparrow delighted observers there, as well. The passerine flight was generally regarded as fair to good, but lacked any boreal-irruptive component.

Loon-Falcon: **Common Loon**: 29 Sep (1) Boone L. (Martha Dillenbeck), early; 14 Nov (505) Boone L. (RLK), breaks the previous state high count, but see mountain region; 14 Nov (21) Nolichucky Waterfowl Sanctuary, Greene Co. (JBH). **Pied-Billed Grebe**: 12 Aug (1) Hmlt. Co. (KAC), ers. **Horned Grebe**: 10 Nov (19) Boone L. (JWC, LCM, JAM), max. **Double-crested Cormorant**: 2 Sep-27 Oct (1-26) Aus. Spr. (RLK); 4-22 Sep (21-56) Rkn. Bot. (RLK et al.); 5 Sep (20) Kingsport (RLK); 5 Oct (8) Johnson City, flying over (RLK); 2 Nov (1) Nolichucky River, Greene Co. (DHM, ACL). **American Bittern**: 13 Oct (1) Bra. Lev. (TLR, KAC et al.). **Great Egret**: numerous reports; 22 Sep (55) Rkn. Bot. (RLK), max; 1 Nov (1) Hiwassee River area, Meigs Co. (Ken Dubke), lrs. **Snowy Egret**: 4 Sep (2) Rkn. Bot. (RLK). **Little Blue Heron**: 6 Aug

- 6 Sep (1 im) Greene Co. (DHM, ACL). **Cattle Egret**: 9 Aug (1) Aus. Spr. (RLK); 11 Aug (18) Hiwassee River area, Meigs Co. (KAC). **Black-crowned Night-Heron**: 6 Sep (3) Greene Co. (DHM, ACL); small numbers at Aus. Spr., Rkn. Bot., & Ktn. Stm. Pl. where expected. **White Ibis**: 6 Aug (1 im) Warrior's Path SP, Sullivan Co. (Van & Catherine Remsen); 8 Aug (1 im) Kinser Park, Greene Co. (JBH); 6-16 Sep (1 im) Aus. Spr. (RLK et al.). **Tundra Swan**: 18 Oct (1) Savannah Bay, Hmlt. Co. (Lil Dubke); 9 Nov - EOP (1) Armstrong Bend WMA, Meigs Co. (Ken Dubke). **Snow Goose**: 20-21 Nov (1 blue) Johnson City (Jerry Nagel). **Northern Shoveler**: 16 Sep (1) Wash. Co. (RLK), ers. **Gadwall**: 28 Sep (5) Greene Co. fall count (fide JBH), ers. **Canvasback**: 23 Nov (22) Bennett L., Marion Co. (DFV, RJH et al). **Redhead**: 10 Nov (30) Boone L. (JWC, LCM, JAM), max. **Ring-necked Duck**: 10 Nov (156) Boone L. (JWC, LCM, JAM), max. **Hooded Merganser**: 17 Aug (1) Ktn. Stm. Pl. (RJH et al.), ers.

TABLE 1. FALL 1996 HAWKWATCH TOTALS FROM SODDY MTN. (WGH ET AL.)
5 Sep - 10 Dec, 56 days

Black Vulture	200	Broad-winged Hawk	1679
Turkey Vulture	906	Red-tailed Hawk	486
Osprey	17	Golden Eagle	2
Bald Eagle	18	American Kestrel	25
Northern Harrier	33	Merlin	2
Sharp-shinned Hawk	367	Peregrine Falcon	6
Cooper's Hawk	38	unknown accipiter	6
Red-shouldered Hawk	25	unknown buteo	9

Total: 1106 vultures & 2713 hawks = 3819

Osprey: 16 Nov (1) Soddy Mtn. (WGH), lrs. Sharp-shinned Hawk: 13/20 Oct (45/46) Soddy Mtn. (WGH), max one day counts. **Northern Goshawk**: 20 Nov (1 ad) Winged Deer Park, Johnson City (FJA). **Red-tailed Hawk**: 22 Nov (63) Soddy Mtn. (WGH), max one day count. **Golden Eagle**: 28 Aug (1 ad) Hawkins Co. (Rick Phillips, Tom Laughlin); 13 Sep/13 Oct (1/1) Soddy Mtn. (WGH); all rather early. **Merlin**: 20/29 Oct (1/1) Soddy Mtn. (WGH); 4 Nov (1) Bra. Lev. (KAC). **Peregrine Falcon**: 12 Oct (1) Hmlt. Co. (RJH, TLR); 14 Sep (1) Rkn. Bot. (JoAnne & Larry Routledge, Linda Northrop); see Table 1.

Sora-Hummingbird: **Sora**: 5-24 Oct (2-4) Bra. Lev. (KAC, TLR et al.); 8 Oct (1) Amnicola Marsh, Hmlt. Co. (DFV, KAC). **American Coot**: 10 Nov (728) Boone L. (JWC, LCM, JAM), max. **Sandhill Crane**: 29 Sep (20) Soddy Mtn. (WGH), ers. **Black-bellied Plover**: 14/22 Sep (1/3) Rkn. Bot. (RLK et al.). **American Golden-Plover**: 4 Sep (1) Rkn. Bot. (RLK); 30 Sep-1 Oct (1) Bra. Lev. (KAC). **Semipalmated Plover**: 21 Oct (1) Aus. Spr. (RLK), lrs. **Killdeer**: 4 Sep (250+) Rkn. Bot. (RLK), max. **American Avocet**: 11/17 Aug (1) Ktn Stm. Pl. (KAC/RJH); 2 Nov (1) Bra. Lev. (Jim & Cynthia Wilkerson). **Greater Yellowlegs**: 14 Nov (1) Boone L. (RLK). lrs. **Lesser Yellowlegs**: 14 Sep (16) Rkn. Bot. (RLK et al.), max. **Sanderling**: 11/17 Aug (1) Ktn. Stm. Pl. (KAC/RJH); 14 Sep (7) Rkn. Bot. (RLK et al.). **Western Sandpiper**: 17 Aug (1) Ktn. Stm. Pl. (RJH); 22 Sep (1) Rkn. Bot. (RLK). **Baird's Sandpiper**: 14 Sep (1) Rkn. Bot. (RLK et al.). **Pectoral Sandpiper**: 14 Sep (50+) Rkn. Bot. (RLK et al.), max. **Dunlin**: 15-27 Oct (1-4) Aus. Spr. (RLK); 23 Oct (3) Savannah Bay, Hmlt. Co. (KAC); 24 Oct

(1) Bra. Lev. (KAC). **Stilt Sandpiper**: 14/22 Sep (3/4) Rkn. Bot. (RLK et al.). **Buff-breasted Sandpiper**: 14 Sep (2) Rkn. Bot. (RLK et al.). **Short-billed Dowitcher**: 1 Aug (1) Wash. Co. (RLK); 17 Aug (1) Morristown Fish Hatchery, Hamblen Co. (RLK et al.). **Common Snipe**: 13 Sep (2) Wash. Co. (RLK), ers. **Bonaparte's Gull**: 14 Sep (1) Rkn. Bot. (RLK et al.), record early in East Tenn. **Ring-billed Gull**: 17 Aug (1) Aus. Spr. (RLK); 17 Aug (1) Ktn. Stm. Pl. (RJH); both early. **Caspian Tern**: 17 Aug (1) Ktn. Stm. Pl. (RJH); 4/14 Sep (1/2) Rkn. Bot. (RLK et al.). **Forster's Tern**: 1/12 Aug (1) Aus. Spr. (RLK); 22 Aug (2) Chickamauga L., Hmlt. Co. (Jim & Cynthia Wilkerson); 14 Sep (3) Rkn. Bot. (RLK et al.); 20 Sep (1) Hmlt. Co. (KAC). **Black Tern**: 1/6 Aug (1) Aus. Spr. (RLK); 22 Aug (7) Boone L. (Glen Eller). **Eurasian Collared-Dove**: 12 Oct (1) Chattanooga (KAC). **Yellow-billed Cuckoo**: 8 Oct (1) Wash. Co. (RLK), lrs. **Barn Owl**: 17 Aug (1) Ktn. Stm. Pl. (RJH); 28 Sep (2) Greene Co. fall count (fide JBH); 1-4 continued present in Johnson City (m.ob.). **Common Nighthawk**: 25 Aug/15 Oct (317/9) Johnson City (RLK), max/lrs. **Ruby-throated Hummingbird**: 28 Oct (1) Hmlt. Co. (DFV), lrs. **RUFOUS HUMMINGBIRD**: 20 Sep - EOP (1 ad male) Hmlt. Co. (Jennifer Martin, m.ob.); 1 Nov - EOP (1 im female) Hmlt. Co. (Stanley Hogan, m.ob.); both banded by Bob Sargent 11 Nov.

Flycatcher-Grosbeak: **Olive-sided Flycatcher**: 14 Aug (1) Sequatchie Co. (KAC); 29 Sep (1) Soddy Mtn. (WGH). **Great Crested Flycatcher**: 29 Sep (1) Boone L. (Martha Dillenbeck). lrs. **Tree Swallow**: 29 Sep (1400) Rkn. Bot. (JWC et al.), max. **Northern Rough-winged Swallow**: 22 Sep (130) Rkn. Bot. (RLK), max. **Red-breasted Nuthatch**: no reports. **Sedge Wren**: 29 Sep (2) Bowmantown, Wash. Co. (RLK); 30 Sep (1) Amnicola Marsh, Hmlt. Co. (KAC); 5-24 Oct (2-3) Bra. Lev. (TLR, KAC). **Marsh Wren**: 29 Sep (2) Bowmantown, Wash. Co. (RLK); 5-24 Oct (5-1) Bra. Lev. (KAC, TLR). **Gray-cheeked Thrush**: 14-26 Sep (1-2) Hmlt. Co. (TLR, KAC). **American Pipit**: 5 Oct (2) Bra. Lev. (KAC), ers. **Yellow-throated Vireo**: 8 Oct (1) Wash. Co. (RLK), lrs. **Philadelphia Vireo**: 15/28 Sep, Oct (1-3) Hmlt. Co. (TLR, KAC); 22-29 Sep (3 reports) Greene Co. (DHM, ACL); 26 Sep (1) Wash. Co. (RLK). **Blue-winged Warbler**: 10/16 Sep (1) Wash. Co. (RLK); 21 Sep (1) Greene Co. (DHM, ACL). **Golden-winged Warbler**: 13/15 Sep (1/3) Hmlt. Co. (TLR); 16/18 Sep (1) Wash. Co. (RLK); 6 Oct (1) Hmlt. Co. (KAC), late. **Orange-crowned Warbler**: 29 Sep (2) Greene Co. (DHM, ACL). **Magnolia Warbler**: 28 Aug (1) Wash. Co. (FJA), ers. **Black-throated Green Warbler**: 31 Oct (1) Wash. Co. (RLK), record late by 6 days in northeast Tenn. **Prothonotary Warbler**: 22 Sep (1) Rkn. Bot. (RLK); 28 Sep (1) Green Co. fall count (fide JBH); both late. **Connecticut Warbler**: 14/28 Sep (1) Greene Co. (DHM, ACL). Mourning Warbler: 28 Sep/6 Oct (1) Greene Co. (DHM, ACL); 1 Oct (1) Hmlt. Co. (Jack Colcolough). **Common Yellowthroat**: 4 Nov (1) Bra. Lev. (KAC), lrs. **Wilson's Warbler**: 21 Sep-1 Oct (3 reports) Hmlt. Co. (TLR, KAC, Jack Colcolough). **Chipping Sparrow**: 27 Nov (1) Greene Co. (DHM, ACL), lrs in north. **HENSLOW'S SPARROW**: 13 Oct (1) Bra. Lev. (KAC, Dan Jacobson et al.), second Hmlt. Co. record. **Lincoln's Sparrow**: 29 Sep/15 Oct (1) Aus. Spr. (RLK); 8 Oct (2) Piney Flats, Sullivan Co. (RLK); 13 Oct (1) Bra. Lev. (Dan Jacobson). **Purple Finch**: 2 Nov (1) Hmlt. Co. (RJH); 6 Nov (3) Sullivan Co. (FJA); 20 Nov (7) Wash. Co. (FJA); only reports. **Pine Siskin/Evening Grosbeak**: no reports.

Locations: Aus. Spr.-Austin Springs, Washington Co.; Boone L.-in Sullivan/Washington Cos.; Bra. Lev.-Brainard Levee, Hamilton Co.; Hmlt. Co.-Hamilton Co.; Ktn. Stm. Pl.-Kingston Steam Plant, Roane Co.; Rkn. Bot.-Rankin Bottoms, Cocke Co.; Soddy Mtn.-in Hamilton Co.; Wash. Co.-Washington Co.

RICHARD L. KNIGHT, 804 North Hills Drive, Johnson City, TN 37604.

EASTERN MOUNTAIN REGION: A cold front moved through the region the second week of November bringing large numbers of waterfowl. There were good counts of Common Loon, Redhead, and American Coot on South Holston Lake, apparently, as a result of the front. For the third straight year, a small flock of Eared Grebe arrived in the fall at South Holston Lake. At Coffee Ridge in Unicoi County, a fog related bird kill occurred on the night of 3-4 October. The remains of 347 migrants representing 32 species were collected. Swainson's Thrush (68) and Ovenbird (48) were the two most common species in the kill; complete details published in this issue.

This was one of the best season reports in recent years for the mountain region in terms of number of field trips, hours of observation, and number of observations reported. Several reports came from the southern part of the region from which very little is usually reported.

Loon-Duck: **Common Loon**: 13 Nov (580) S. Hol. L. (RLK), new high count for the state. **Pied-billed Grebe**: 13 Sep (46) Watauga L. (RLK), notable early influx; 24 Oct (93) S. Hol. L. (LCM), max, lake record. **Horned Grebe**: 27 Oct (25) S. Hol. L. (LCM, JWC); ers. **EARED GREBE**: 14 Sep (5) S. Hol. L. (JWC, RMC), ers; 6 Oct (21) S. Hol. L., TN & VA sides (RMC, RBB), max, flock moved back and forth over state line, thus recording the record high count for this species for both states. **Double-crested Cormorant**: 19 Sep (2) Unaka Mountain, Unicoi Co. (Rick A. Phillips), flyover at high elev.; 29 Sep (1) Ripshin Lake, Carter Co. (FJA); 8/29 Sep (1/2) Roan Cr. (JWC, LCM/TSM, DEH); 20 Oct (1) Chota (DJT); 10 Nov (80) S. Hol. L. (LCM, JWC, JAM), max. **Great Egret**: 4 Aug (21) S. Hol. L., TN & VA sides (Bristol Bird Club), max, lake record; 17 Aug (1) Roan Cr. (RLK); 1 Oct (1) S. Hol. L., VA side (RMC), lrs. **Black-crowned Night-Heron**: 15 Aug (2) S. Hol. L. (JWC). **Tundra Swan**: 10 Nov (2) S. Hol. L. (Joanne & Larry Routledge, Don Miller). **Snow Goose**: 9/13 Nov (1 white morph) Middlebrook L. (JWC/RLK). **Canada Goose**: 9 Oct (500) Middlebrook L. (JWC), seven with VA Game Commission neck collars. **Green-winged Teal**: 3 Nov (22) S. Hol. L. (JWC, LCM, JAM), max. **American Black Duck**: 29 Sep (1) Roan Cr. (TSM, DEH), early. **Northern Pintail**: 2/21 Nov (2 m/3 m) Middlebrook L. (LCM, JWC/RLK); 14 Nov (10) S. Hol. L. (JWC, Ron Harrington), max. **Blue-winged Teal**: 29 Sep (27) S. Hol. L. (JWC, LCM), max; 14 Oct (11) pond on Heaton Creek, near Roan Mt. (RLK); 17 Nov (5) S. Hol. L. (JWC, LCM), lrs. **Northern Shoveler**: 24 Oct (2 f) S. Hol. L. (LCM); 2 Nov (4) Watauga River, Carter Co. (RLK). **Gadwall**: 3 Nov (12) Sullivan Co. (Ken D. Hale), max. **Redhead**: 2 Nov (11) Watauga L. (RLK); 10 Nov (253) S. Hol. L., VA side (LCM, JWC, JAM), max. **Ring-necked Duck**: 10 Nov (148) S. Hol. L., VA side (LCM, JWC, JAM), max. **Lesser Scaup**: 21 Oct (2) S. Hol. L. (LCM); 2 Nov (34) Watauga L. (RLK); 10 Nov (45) S. Hol. L., VA side (LCM, JWC, JAM). **Oldsquaw**: 17 Nov (1 f) S. Hol. L. (JWC et al.). **Surf Scoter**: 2 Nov (2) Watauga L. (RLK). **Bufflehead**: 3 Nov (22) S. Hol. L. (LCM, JWC, JAM), ers; 28 Nov (97) S. Hol. L., at weir (JWC, Andy Jones), max. **Hooded Merganser**: 3 Nov (17) Middlebrook L. (LCM, JWC, JAM), ers; 17 Nov (65) Middlebrook L. (JWC), max. **Common Merganser**: 2 Nov (2) Watauga River, Carter Co. (RLK). **Red-breasted Merganser**: 27 Oct (1) S. Hol. L. (LCM, JWC), ers. **Ruddy Duck**: 21 Oct (4) S. Hol. L. (LCM); 2 Nov (12) Watauga L. (RLK); 11 Nov (4) S. Hol. L. (Joanne Routledge et al.)

Vulture-Flicker: **Black Vulture**: 2 Nov (17) Hunter, Carter Co. (RLK). **Osprey**: 4 Aug (1) S. Hol. L. (Van Remsen, JWC, RLK et al.), early; 29 Sep (4) S. Hol. L. (RBB, RMC), max; 1 Oct (2) S. Hol. L. (RMC), lrs. **Bald Eagle**: 8 Sep (1 im) Doeville, Johnson

Co. (JWC, LCM, John Shumate). **Broad-winged Hawk**: 19 Sep (192) Roan Mt. (RLK), max. **Merlin**: 4 Oct (1) Roan Mt. (RLK); 21 Oct (1) S. Hol. L. (JWC, LCM), a Sharp-shinned Hawk made several dives at it, trying to run it off. **Peregrine Falcon**: 4 Oct (1) Roan Mt. (RLK). **Northern Bobwhite**: 21 Oct (1) e Sullivan Co. (LCM), only report. **Virginia Rail**: 10 Aug (1) Bristol Industrial Park Marsh, Sullivan Co. (James W. Brooks, ARH). **Sora**: 20 Oct (1) Chota (DJT). **American Coot**: 2 Nov (600) Watauga L. (RLK); 10 Nov (500/2000) S. Hol. L., TN side/VA side (LCM, JWC, JAM). **Solitary Sandpiper**: 8 Sep (1) Carver's Gap (RLK), apparently lost in fog. **Ruddy Turnstone**: 6/17 Sep (1) S. Hol. L. (RLK/JWC). **Pectoral Sandpiper**: 6 Sep (1) S. Hol. L. (LCM). **American Woodcock**: 26 Aug (1) & 8 Sep (1) Carver's Gap (RLK). **Laughing Gull**: 5 Aug (1) Eliz. (TSM). **Bonaparte's Gull**: 24 Oct/3 Nov (1/4) S. Hol. L. (JLS/LCM, JWC, JM). **Herring Gull**: 23 Sep (1) Roan Mt. (RLK), flying over. **Caspian Tern**: 2/17 Sep (1/2) S. Hol. L. (LCM/JWC, RMC); 13 Sep (2) Watauga L. (RLK); 29 Sep (1) Hampton Creek Cove, Roan Mt. (FJA), flying over. **Forster's Tern**: 6 Sep (3) S. Hol. L., VA side (LCM). **Black Tern**: 6 Sep (1) S. Hol. L (LCM). **Black-billed Cuckoo**: 4 Oct (3 dead) Coffee Ridge (FJA, RLK), fog related kill. **Ruby-throated Hummingbird**: 17 Oct (1) Carter Co. (fide RLK), late. **Red-headed Woodpecker**: 5 Oct (1) Cades Cove, Great Smoky Mountains National Park (DJT); 20 Oct (1) Chota (DJT); 20 Nov (2) Tellico Lake, Monroe Co. (ARH). **Northern Flicker**: 4 Oct (45) Carver's Gap (RLK), notable migratory movement.

Flycatcher-Vireo: **Olive-sided Flycatcher**: 3 Sep (1) Holston Mountain, Sullivan Co. (JWC, LCM). **Eastern Kingbird**: 29 Sep (1) Eliz. (Gary O. Wallace, H. P. Langridge), late. **Horned Lark**: 17 Nov (7) S. Hol. L. (LCM, JWC). **Bank Swallow**: 26 Aug - 1 Sep (20) Carver's Gap (RLK), migrating thru, first Roan Mt. record. **Cliff Swallow**: 30-31 Aug (5) Carver's Gap (RLK), migrating thru, second Roan Mt. record. **Tufted Titmouse**: 30 Sep, 16-17 Oct (4 banded) Carver's Gap (RLK), unusually high elev. **Sedge Wren**: 27 Sep (1) S. Hol. L. (RMC, JWC, Keven Hamed); 28 Sep (1) Holston Valley, Sullivan Co. (RPL, JWC); 5 Oct (2) Coffee Ridge (FJA, RLK). **Marsh Wren**: 17 Sep (1) Eliz. (TSM); 5 Oct (3) Laurel Lake, Blount Co. (DJT). **Blue-gray Gnatcatcher**: 30 Sep (1) Carver's Gap (RLK), uncommon at this elev. in migration. **Gray-cheeked Thrush**: 20 Sep - 7 Oct (3 banded) Carver's Gap (RLK); 29 Sep (24) Eliz. fall count (m. ob.); 4 Oct (20 dead) Coffee Ridge (FJA, RLK), fog related kill. **Swainson's Thrush**: 1 Sep - 6 Oct (53 banded) Carver's Gap (RLK); 29 Sep (134) Eliz. fall count (m. ob.); 4 Oct (68 dead) Coffee Ridge (FJA, RLK), fog related kill. **American Pipit**: 15 Oct (4) Carver's Gap (RLK); 16 Oct (2) S. Hol. L. (BBC); 10 Nov (86+) e Sullivan Co. (JWC). **Philadelphia Vireo**: 15 Sep (1 banded) Big Bald Mountain, Unicoi Co. (George R. Mayfield).

Warbler-Grosbeak: **Blue-winged Warbler**: 18 Sep (1) Roan Mt, low elev. (RLK); 27 Sep (1) S. Hol. L. (RLK). **Golden-winged Warbler**: 21 Sep (1) Roan Mt., low elev. (RLK). **Tennessee Warbler**: 1 Sep (1) Carver's Gap (RLK), ers. **Orange-crowned Warbler**: 20 Oct (1) Chota (DJT). **Cape May Warbler**: 1 Sep (1) Eliz. fall count (RLK), ers. **Yellow-rumped Warbler**: 29 Sep (3) Carver's Gap (FJA, Gary O. Wallace, H. P. Langridge), ers. **Blackpoll Warbler**: 4 Oct (1 banded) Carver's Gap (RLK), rare in fall. **Cerulean Warbler**: 29 Sep (1) Ripshin Lake, Carter Co. (FJA), scarce in fall. **Swainson's Warbler**: 29 Sep (1) Roan Cr. (TSM, DEH), rare in fall. **Kentucky Warbler**: 19 Sep (2 banded) Carver's Gap (RLK). **Connecticut Warbler**: 6 Oct (1) Stoney Creek, Carter Co. (TSM). **Mourning Warbler**: 2 Oct (1) Roan Mt., low elev (RLK). **Wilson's Warbler**: 18 Sep (1) Roan Mt. State Park (RLK). **Chipping Sparrow**: 2 Nov

(2) Watauga L. (RLK), lrs. Savannah Sparrow: 19 Sep (1) Carver's Gap (RLK). **Fox Sparrow**: 20 Nov (1) Tellico Lake, Monroe Co. (ARH). **Lincoln's Sparrow**: 29 Sep (2), 5 Oct (1) Carter Co. (TSM); 5 Oct (1) Coffee Ridge (FJA). **Bobolink**: 4 Oct (1 dead) Coffee Ridge (FJA, RLK), fog related kill. 5 Oct (1) Laurel Lake, Blount Co. (DJT). **House Finch**: 1 Sep, 17 Oct (1) Carver's Gap, flying thru (RLK), unusually high elev. **Pine Siskin**: 1-4 all season at Roan Mt. (RLK). **Evening Grosbeak**: 12 Nov (1) Holston Valley, Sullivan Co. (RPL).

Locations: Carver's Gap-Carver's Gap, Roan Mountain, Carter Co.; Chota-Chota Waterfowl Refuge, Monroe Co.; Coffee Ridge-Coffee Ridge, Unicoi Co.; Eliz.-Elizabethton, Carter Co.; Middlebrook L.-Middlebrook Lake, Sullivan Co.; Roan Cr.-Roan Creek arm of Watauga Lake, Johnson Co.; Roan Mt.-Roan Mountain, Carter Co.; S. Hol. L.-South Holston Lake including a weir below the dam, Sullivan Co.; Watauga L.-Watauga Lake, Carter Co.

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Standard Abbreviations

*	details submitted	Is.	Island
ad	adult	L.	lake
Co.	County	lrs	latest reported sighting
EOP	End of Period	max	maximum one day count
ers	earliest reported sighting	Mtn.	mountain
et al.	and others	NWR	National Wildlife Refuge
fide	reported by	SP	State Park
im	immature	WMA	Wildlife Management Area

(number) = maximum number seen during period

OBSERVERS

FJA	Fred J. Alsop	OKM	O. Knox Martin
RBB	Rob B. Biller	CWM	Charles W. McCrary
CHB	Carolyn N. Bullock	LCM	Larry C. McDaniel
KAC	Kevin A. Calhoon	TSM	Tom S. McNeil
RMC	Ron M. Carrico	SNM	Susan N. McWhirter
JWC	J. Wallace Coffey	DHM	Don H. Miller
LCC	Lula C. Coffey	FFM	Fox F. Miller
BJC	B. Jack Colwick	JAM	Judy A. Musick
WGC	William G. Criswell	WRP	William R. Peoples
HBD	Helen B. Dinkelspiel	TAR	Tom A. Reynolds
JAF	James A. Ferguson	VBR	Virginia B. Reynolds
SCF	Sue C. Ferguson	TLR	Tommie L. Rogers
MLG	Murray L. Gardler	SGR	S. Gwin Rogers
MAG	Mark A. Greene	AJT	Alan J. Trently
WGH	William G. Haley	DJT	David J. Trently
RJH	R. John Hederson	DFV	David F. Vogt
MaH	Martha Heineman	JEW	James E. Waldron
ARH	Audrey R. Hoff	MGW	Martha G. Waldron
JBH	James B. Holt	BHW	Barbara H. Wilson
DEH	Dan E. Huffine	BBC	Bristol Bird Club
RLK	Richard L. Knight	KOS	Kentucky Ornithological Society
RPL	Richard P. Lewis	MTOS	Memphis Chapter, TOS
ACL	Alice C. Loftin	TOS	Tennessee Ornithological Society

INSTRUCTIONS TO AUTHORS

The Migrant records observations and studies of birds in Tennessee and adjacent areas. Most articles are written by members of the Tennessee Ornithological Society.

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NOMENCLATURE: The scientific name of a species should be given after the first use of the full common name in the text. The scientific name should be underlined and in parentheses. Names should follow the A.O.U. Check-list of North American Birds (sixth edition, 1983, or supplements).

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ABSTRACT: Manuscripts of five or more typed pages should include an abstract. The abstract should be less then 5% of the length of the manuscript. It should include a brief explanation of why the research was done, the major results, and why the results are important.

LITERATURE CITED: List all literature citations in a Literature Cited section at the end of the text. Text citations should include the author and year.

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NOTICE TO RESEARCHERS

Several references in this issue include dates later than the cover date of March 1997. The journal is behind schedule and it has been necessary to use material which, in some cases, was submitted and accepted later in the year.

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